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Subsurface Exploration and Geotechnical Engineering Report

CTA Green Line Elevated Station

Damen & Lake
Chicago, Illinois

Submitted to:
Mr. Terry R. McDonnell
Simpson Gumpertz & Heger
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Chicago, IL 60603

Submitted by:
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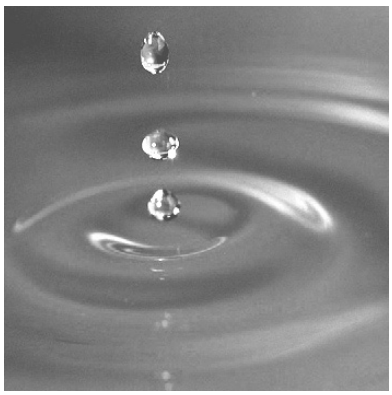
July 12, 2018

Project 1801815



Ryan C. Rusk, P.E.
Senior Professional

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July 12, 2018
GEI Project No. 1801815

VIA EMAIL: *TRMcdonnell@sgh.com*

Mr. Terry R. McDonnell
Simpson Gumpertz & Heger
135 South LaSalle Street
Chicago, IL 60603

RE: Subsurface Exploration and Geotechnical Engineering Report for the CTA Green Line Elevated Train Station at Damen Avenue in Chicago, Illinois

Dear Mr. McDonnell:

GEI Consultants, Inc. (GEI) has completed our geotechnical report for the new train station and track modifications planned for the CTA Green Line at the intersection of N. Damen Avenue and Lake Street.

Based on the pressuremeter testing, belled caisson foundations bearing at elevation -55 to -57 CCD may be designed using a net allowable bearing pressure of 32 ksf.

Additional loads imposed by the new CTA track to the existing columns which cannot be accommodated by existing foundations should be supported by new drilled-in rock socketed micropiles. Micropiles can be sized to support axial loads as high as 500 kips.

We appreciate the opportunity to provide our services for this project. Please do not hesitate to call with any questions regarding our report.

Sincerely,

GEI CONSULTANTS, INC.

Ati Fathi, P.E.
Senior Professional

Ryan C. Rusk, P.E.
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AF:nls

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1. Purpose and Scope of Work

GEI Consultants, Inc. (GEI) has prepared this report for Simpson Gumpertz & Heger in accordance with our proposal dated October 6, 2017. The purposes of this report are to report the field and laboratory test data, and to provide recommendations regarding the design and construction of deep and shallow foundations for the project.

Project consists of a new 3-story train platform above Lake Street crossing Damen Avenue in Chicago, Illinois. The proposed station will be used for pedestrian traffic coming onto and from the CTA Green Line. Consideration is being given to reusing the existing train support columns which are supported on shallow spread footings. We understand that the original Damen Station was built in late 1890s and was closed in 1948.

The site grade varies between elevation +15 and +17 Chicago City datum (CCD).

Figure 1: Project Site at N. Damen Avenue and Lake Street, Chicago, IL (*rep. from Google Earth*)

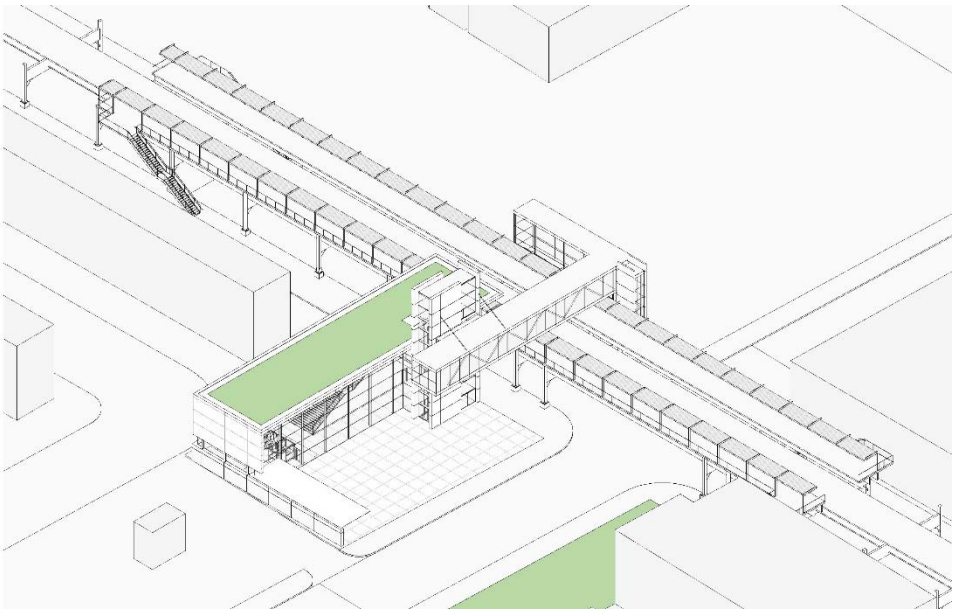


Figure 2: Preliminary Project Rendering, looking northwest

The preliminary column loads provided by the structural engineer, Simpson Gumpertz & Heger, are reproduced below.

Table 1: Preliminary structure loads

Foundation Type	*Location*	*Gravity Load (DL+LL)*	*Tention Load*
Micropile	Typical Track/Platform Columns	430 kips	35 Kips
Caisson/Spread Footing	Typical Station House Columns	120 kips	-
Spread Footing	Stair Columns	20 kips	-

2. Subsurface Exploration

2.1 Exploration Procedures

2.1.1 Soil Borings

A total of seven (7) test borings were completed on site as indicated below (B-101 to B-107) by Geo Services, Inc. under subcontract to GEI. In addition, two borings (B-5 and B-6) were drilled by O'Brien & Associates, Inc, in June 2000. A boring location diagram is also provided in Appendix A.

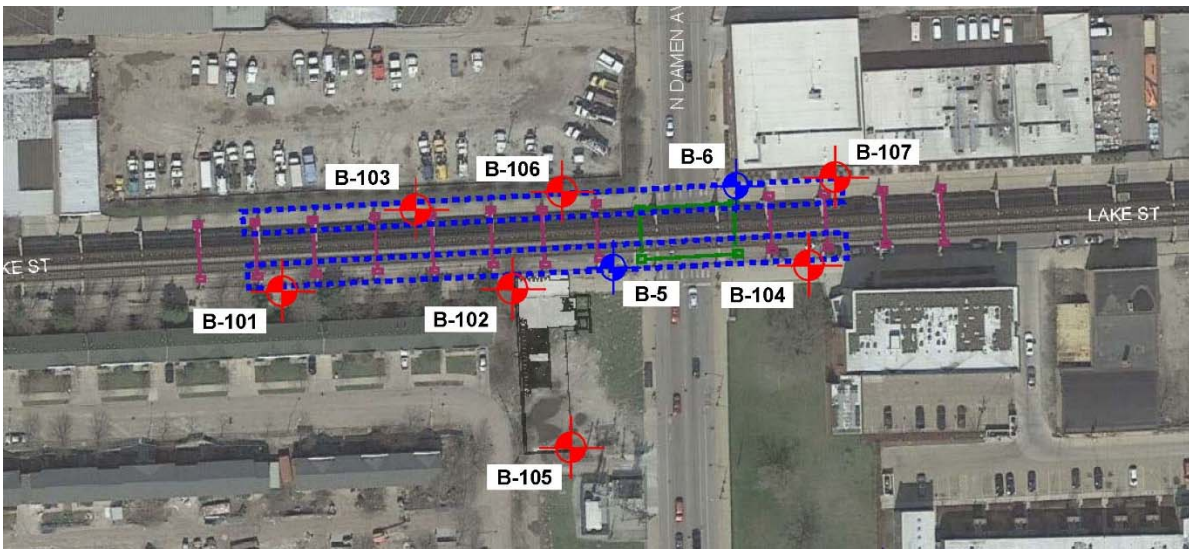


Figure 3: Soil boring locations for Lake & Damen CTA Station in Chicago, IL (*image rep. form Google Earth*)

The borings were completed using a truck-mounted rotary drill rig. The boreholes were advanced through the soil using temporary casing and a wash boring technique employing a tricone drilling bit and drilling fluids. Representative soil samples were obtained in general accordance with split-barrel sampling procedures as outlined in ASTM Standard D 1586. The rock coring was performed in general accordance with diamond core drilling procedures as outlined in ASTM D 2113.

A field log for each boring was prepared by the drill crew. The log included visual classifications of the materials encountered during drilling, as well as the driller's interpretation of the subsurface conditions between samples. The depth at which groundwater was encountered while sampling or drilling was observed and noted on the field logs. The groundwater observations are presented on the lower left corner of the soil boring logs included in Appendix A.

The soil samples were field sealed and transported to our geotechnical laboratory for further examination and testing. The borehole was grouted to existing grade upon completion of the drilling operations, and the pavement was patched. The final boring log included with this

report represent an interpretation of the field log and include modifications based on laboratory observation and results of tests of the samples.

2.2 Specialized Field Testing Procedures

In addition to the standard exploration and sampling, GEI provided a program of specialized field testing as part of the subsurface investigation. In-situ vane shear testing was performed to provide a better estimate of soil shear strength for the design of earth retention systems, and to evaluate the potential for lateral squeeze of soft clay during caisson excavations.

A series of pressuremeter tests was performed to provide supplemental information to define the allowable soil bearing pressure for foundation design and estimating settlement. The pressuremeter test consists of lowering an inflatable probe into the borehole to the desired test depth. The probe is expanded against the soils forming the walls of the borehole, and the pressure required to expand the probe and the corresponding volume changes are recorded incrementally. In effect, an in-situ stress-strain load test is performed in the soil. The results of the pressuremeter test can be related empirically to both allowable bearing capacity and settlement estimates.

The results of the vane shear and pressuremeter tests are included in Appendix A.

2.3 Laboratory Procedures

Representative portions of the soil samples were visually examined by a geotechnical engineer to estimate the distribution of grain sizes, plasticity, organic content, moisture condition, color, presence of lenses and seams, and apparent geological origin. A calibrated hand penetrometer was used to estimate the approximate unconfined compressive strength of the cohesive soil samples. The soils were classified in accordance with our standard practice and assigned group symbols consistent with those recommended by the Unified Soil Classification System. A chart describing the classification system is included in Appendix A.

The N size rock cores were visually examined to estimate the extent of weathering, presence of in-filled seams, joints, and inclusions, and to determine the apparent geologic origin. A Rock Quality Designations (RQD) was estimated for each core run.

Results of the field and laboratory tests were plotted on the boring logs which are included in Appendix A. Similar soils were grouped into strata on the log. Please note that the strata contact lines represent approximate boundaries between soil types. The actual transition between soil types in the field may be gradual in both the horizontal and vertical directions.

All soil and rock samples recovered from the borings will be retained for a period of 60 days, after which time they will be discarded unless other specific instructions as to their disposition are received.

3. Subsurface Conditions

3.1 Chicago Geology and Local Soil Conditions

The Chicago subsoils are predominantly composed of large masses of clay and silt deposited as a series of ground moraines (or glacial till sheets) lying one atop another, by the advances and retreats of the continental ice sheet during the Wisconsin glacial period. Geologically, six separate till sheets, representing six advances and retreats of the ice front, have been identified: (from bottom up typically) the Valparaiso moraine, Tinley moraine, and the Lake Border moraine which is comprised of the Park Ridge, Deerfield, Blodgett and Highland Park till sheets.

Fill material was encountered in the borings to depths of about 3.5 to 6 feet below existing grade. The fill is underlain by 3 to 5 feet of beach sand and 3 to 10 feet of weathered (overconsolidated) stiff to very stiff clay, which is often locally described as the "clay crust."

The cohesive soil profile is comprised of approximately 20 to 30 feet of compressible clay (Blodgett and Deerfield), 30 to 40 feet of lacustrine and low plasticity clay (Park Ridge), and 20 to 25 feet of glacially consolidated clayey silt and silty clay (Tinley moraine). The top of the Tinley moraine till sheet which is commonly referred to as "hardpan," was encountered between elevation -50 and -55 CCD.

A 5 to 8-foot thick layer of water bearing silt, sandy silt and gravel is present below the hardpan immediately above the bedrock. These materials are consistent with the stratified gravelly till which comprise the Valparaiso moraine. The granular deposits are almost always saturated and are highly permeable, although there is no evidence the layer is hydraulically connected to the Chicago River or Lake Michigan. Boulders are common, and immediately above the surface of the rock, large fragments of decomposed and extremely weathered rock may be present tilted at various angles.

The Chicago bedrock consists of shallow dolomite formations mainly of Silurian age, and deep sandstone and dolomite formations of Cambrian and Ordovician age. The Devonian shale which once covered the dolomite was almost completely removed by glacial ice sheets and redeposited as part of the Tinley moraine. In the Chicago area, the shale survives only as in-fills of fissures within the Silurian dolomite. The Niagaran series immediately underlies the glacial drift, and it varies in thickness from 240 to 425 feet, generally increasing eastwards towards the Lake Michigan basin. The top of bedrock was encountered in the borings at approximately elevation -80 to -84 CCD.

The above summary is intended to provide an indication only of the major soil units encountered during the subsurface exploration. Conditions between individual boring locations may vary. Geological profiles (fence diagrams) across the site are provided in Appendix A.

Table 2: General subsurface profile and geotechnical parameters

								Mohr-Coulomb		Pressuremeter			LPile	
Age	Unit	Log	Name	Description		T/Layer Elevation (CCD)	Total Unit Wt, γ	Shear Strength, S_u (Adhesion, C_a)	Friction Angle, ϕ	Creep Pressure, P_f	Limit Pressure, P_l	Pressure Modulus, E_d	p-y Subgrade Modulus, k	E_{50}
			Fill	VIII	Man placed material consisting predominantly of sand-size particles with varying inclusions of cinders, brick, and concrete fragments.	+17	120-125 pcf	-	28-30 deg	-	-	-	40-60 pci	-
Pleistocene - Wisconsin	Littoral Drift		Sand	VII	Fine to medium sands and silty sands with varying coarse sands and gravel, typically overlying loose to very loose silts and sandy silts.	+13	110-120 pcf	-	26-28 deg	-	-	-	30-50 pci	-
	Littoral Drift		Glacial Lake Bottom	VI	Weathered, over-consolidated clay with low to medium PI. Identified by Peck and Reed as "Desiccated Clay Crust."	+10	125-130 pcf	1.5-3 ksf (0.8-1.5 ksf)	-	-	-	-	400-600 pci	0.008-0.010
	Glacial Drift / Lake Border moraines		Blodgett and Deerfield	V	Grey to bluish grey clay and silty clay with occasional non-persistent silt and sandy silt seams. Normally to slightly overconsolidated with OCR between 1.1 and 1.6.	+4	122-127 pcf	0.5-1.0 ksf (0.4-0.5 ksf)	-	-	-	-	350-550 pci	0.009-0.012
	Glacial Drift / Lake Border moraines		Park Ridge	IV	Lacustrine and low plasticity clay with natural moisture content between 18-22%. Transitional zone of variable thickness.	-20 to -25	130-135 pcf	1.5-2 ksf (0.8-1 ksf)	-	15-18 tsf	30-37 tsf	200-300 tsf	700-1,000 pci	0.006-0.008
	Glacial Drift / Lake Border moraines		Tinley moraine	III	Glacially consolidated low plasticity clay, silty clay and clayey silt. Blow counts in excess of 40 bpf and natural moisture contents below 14%. Locally referred to as "Chicago Hardpan."	-52 to -55	130-135 pcf	5-7 ksf (2.5-3.5 ksf)	-	18-33 tsf	40-73 tsf	300-600 tsf	1,500-2,500 pci	0.003 – 0.005
	Glacial Drift / Terminal moraine		Valparaiso moraine	II	Extremely dense sandy silt, silty gravel and gravelly sand with occasional cobbles and boulders.	--72 to -75	130-135 pcf	-	35-38 deg	30-35 tsf [1]	60-70 tsf [1]	900-1,300 tsf [1]	95-110 pci	-
												Hoek-Brown		
Age	Unit	Log	Name	Description		T/Layer Elevation (CCD)	Total Unit Wt, γ	Uniaxial Strength	Young's Modulus, E_r	RQD (RMR)	GSI	c'	ϕ'	K_{rm}
Silurian	Niagran Series		Dolomite	Ib	Extremely weathered to disintegrated dolomite	-75 to -81	135-140 pcf	-	-	-	20-25	20-30 ksf	18-23 deg	0.00008
	Niagran Series		Dolomite	Ia	Fresh to moderately weathered, hard to medium, grey to light tan, blocky, slightly to moderately vuggy dolomite and dolomite limestone. Generally near-horizontal bedding with slightly inclined to near-vertical joints.	-81 to -84	150-160 pcf	9-16 ksi [2]	1,000-2,000 ksi [2]	50-90 (70-80)	55-65	70-115 ksf	32-35 deg	0.00005

Notes: 1 Pressuremeter values based on results from other nearby sites; no testing performed in this unit
2 Typical values for Chicago-area dolomite

3.2 Groundwater Conditions

Groundwater in Chicago is contained in three primary aquifer systems. The shallowest aquifer occurs in the fill and upper sand deposits of the glacial drift, and it is directly influenced by the surface levels of the Chicago River and Lake Michigan. The remaining aquifers are contained within the bedrock.

Groundwater was observed in the borings at depths ranging between 5 to 8 feet below existing surface grades. Based on the results of borings and nearby projects, the long-term shallow groundwater table should be assumed at elevation +10 CCD for the purposes of design.

Piezometer observations in Chicago typically indicate vertical drainage of the upper aquifer to the underlying bedrock. Saturation in most areas extends downward into the Park Ridge till sheet at which point the low permeability of the glacial drift begins to impede flow.

The groundwater level measurements represent conditions at the times and locations indicated. Groundwater levels should be expected to vary throughout the year in response to changes in the amount of precipitation, leakage from utilities, evaporation, surface runoff, and drainage for nearby basement structures.

3.3 Infiltration Test Results

The infiltration tests were performed in urban fill. The infiltration rate varied between 2.8 and 3.5 in/hr. Therefore, based on the limiting field test results, we recommend the use of a design rate of 2.8 in/hr for this project within the upper urban fill materials.

4. Analysis and Recommendations

4.1 Track Foundations: Rock Socketed Micropiles

Rock socketed piles could be used to support additional loads which cannot be carried by existing foundations. Micropiles consist of small diameter, typically less than 10-inch diameter, high-strength flush couple threaded steel pipe casing meeting API Standard for (80 ksi minimum yield), and filled and pressure grouted with neat cement grout.

The existing borings indicate the top of bedrock is at an approximate elevation range of -81 to -84 feet CCD.

Section 18(13-132-350) of the Chicago Building Code limits the compressive stress in steel piles to 12 ksi. In 2017, the City of Chicago Department of Buildings issued a revised Code Memorandum for Pile Deep Foundations which permitted the use of higher allowable stresses. When installed in conjunction with a load test on a production pile, the maximum allowable steel stress is limited to 0.35 Fy, or 28 ksi for Grade 80 steel. The City of Chicago will require a load test to twice the design load in accordance with ASTM D 1143 Method A for permitting regardless of design load.

The structural axial capacity of a fully cased micropile is determined as:

$$P_{allow} = 0.4 f_c' A_{grout} + f_y A_s$$

Where: f'_c = Unconfined compressive strength of grout (28 day)
A_{grout} = Area of confined grout (ID_{casing} less area of reinforcement)
f_y = Allowable steel stress (max 28 ksi)
A_s = Area of steel (casing plus reinforcement)

For the purposes of analysis, grout within the rock socket is defined as confined. Using the above equation, the axial capacity of typical micropiles with a 2-foot long socket into medium strength dolomite in typical dolomite is determined as:

Table 3: Axial capacity of typical micropiles

		Allowable Axial Capacity	
Casing [1]	*Reinforcement* [2]	*Compression* [3]	*Tension* [4]
7" OD x 0.498" Wall	#9 Threadbar (Gr 75)[4]	180 kip	36 kip
9.625" OD x 0.545" Wall	#11 Threadbar (Gr 90)[4]	295 kip	45 kip

Notes:
1. API N-80, nominal 80 ksi yield
2. ASTM A615 (Gr 75), Gr 90 in #11 only, ASTM A722 (Gr 150)
3. Assumes f'_c = 5,000 psi and 2-ft long rock socket in mid-strength dolomite bedrock
4. Casing may not be considered to resist tension force and a full length threadbar into dolomite is required with a load test per ASTM D3689

The actual length of the rock socket will be a function of the casing diameter and the design loading. It is recommended that the micropiles be socketed no less than 2 feet into bedrock to minimize the potential for shear failure along natural bedding planes. For the typical Chicago dolomite, micropiles between about 7 and 10 inches in diameter should be expected to have socket lengths from 4 to 6 feet to fully develop the structural design capacity. It should be noted that the length of the socket may also be controlled by tension loading.

All pipe casing should be produced from new billet steel. The casing may be "Mill Secondary," however, restored or recycled products should not be allowed per API Standard. The total settlement (including elastic shortening) of an approximately 100-foot long micropile is estimated to be less than about 0.75 to 1-inch under its maximum allowable compression load.

4.1.1 Lateral Capacity Analyses

Lateral analyses of the typical size rock socketed micropile were performed for free- and fixed-headed boundary conditions using the p-y curve method.

A free-headed analysis is generally applied to cases where a pile extends above the ground line, or it can be conservatively applied when the pile is minimally embedded in the cap. A shaft fully embedded in a concrete grade beam, mat for cap may be modeled using fixed-headed boundary conditions. The loading in this case would consist of a lateral shear force and a slope (set equal to zero) at the pile head, and a vertical compression load. In most cases, the actual drilled shaft response will be somewhere between the values predicted for the fixed-headed and free-headed boundary conditions. The input boundary conditions are used by LPile for the solution of the finite difference equations which model the pile as a beam-column. Despite the similarity of the terms, they should not be confused with support conditions as defined by classical mechanics of materials. Plots of pile-head deflection and moment versus lateral load are included in the Appendix B.

Table 4: Summary of parametric lateral load analyses for foundation caissons

Micropile Diameter	*Lateral Load*		*Max. Moment*		*Horizontal Spring Constant, $k_{s\text{-}h}$*	
	Free Head	*Fixed Head*	*Free Head*	*Fixed Head*	*Free Head*	*Fixed Head*
7.0"	7 kip	17.2 kip	276 kip-in	514 kip-in	14 kip/in	34.4 kip/in
9.625"	13.3 kip	32 kip	588 kip-in	1,421 kip-in	26.6 kip/in	64 kip/in

Notes: Horizontal spring constant determined for allowable deflection of 0.5 inch.

4.2 Station Foundations: Belled Caisson Foundations

End bearing, belled caissons or straight shafts bearing at approximately -55 to -57 CCD may be designed using a net allowable bearing pressure of 32 ksf.

Bearing capacity analyses were performed to verify that the pressures beneath typical belled caissons would be within the limits set forth by Menard (1975) and Briaud (1987). Using the results of the pressuremeter tests, the allowable bearing pressure was determined as:

Table 5: Recommended bearing capacity and settlement of caisson foundations

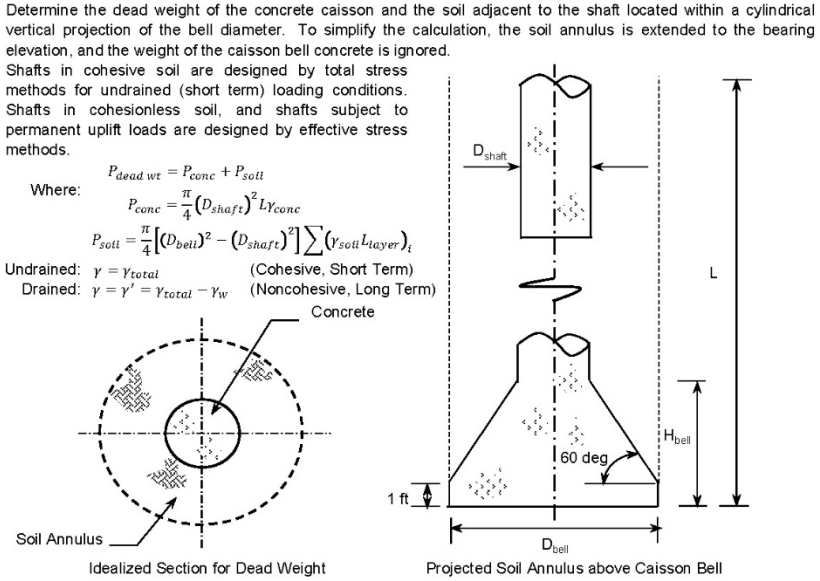
Shaft Diameter [1]	*Bell Diameter (max=3D)* [2]	*Bearing Elevation*	*Net Allowable Bearing Pressure*	*Max Axial Load* [3]	*Est Settlement*
2'-6"	-	-55 to -57 CCD	32 ksf	155 kip	½ - 1 inch
2'-6"	5 ft			625 kip	½ - 1 inch

Notes: 1. Minimum shaft diameter is 30 inches
2. CBC requires bells be a min. 1-ft thick at design edge and that sides slope at 60 deg (from horiz.)
3. Axial load determined for maximum allowable bearing capacity

The maximum net allowable bearing pressure is the pressure which may be transmitted to the foundation soils in excess of the final minimum surrounding overburden pressure. In accordance with the Chicago Building Code, a 33% increase can be applied to the allowable bearing pressure for wind and seismic loading. Side friction is ignored when computing the capacity of belled caissons to resist compression loads. The settlement was determined for the maximum allowable bearing pressure.

4.2.1 Caisson Uplift Capacity

It is recommended that the ultimate uplift capacity of belled caissons with full length reinforcement be estimated based on the combined self weight and side friction as shown below.



Determine the side resistance as the summation of the average shear mobilized in the soil layers along the caisson shaft. The top 5 ft, and a length equal to one shaft diameter above the bell, is ignored in the calculation. The resistance in uplift is limited to 70% that developed in compression.

$$P_f = \pi D_{shaft} \sum \left(f_s L_{layer}\right)_i$$

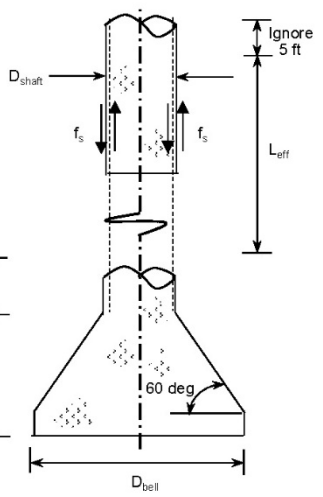
Where:

$$f_s = 0.7 \alpha S_u$$

$$L_{eff} = L - H_{bell} - D_{shaft} - 5ft$$

$$H_{bell} = \frac{1}{2}\left(D_{bell} - D_{shaft}\right) \tan 60 + 1ft$$

For straight-shaft piles, the side resistance is determined as the average shear mobilized in the soil layers along the shaft excluding the upper 5 ft and the bottom 1 shaft diameter. The dead weight is limited to the shaft concrete.



Idealized Geometry for Side Resistance

Total Uplift Resistance: $P_{uplift} = P_{dead\ wt} + P_f$

Figure 4: Uplift capacity for foundation caissons

Based on typical loading, we anticipate that the service uplift demand is from wind load and therefore is a short-term load. In addition, the soil profile is mainly comprised of cohesive soils and therefore a total analysis (short term) is used for uplift analysis. For the recommended bearing elevation, and the provided shaft and bell size, the ultimate and allowable uplift capacity is calculated as indicated below.

Table 6: Uplift capacity of belled caisson foundations

Shaft Diameter	*Bell Diameter*	*Bearing Elevation (Length)*	*Ultimate Uplift Capacity* *Short Term (Total Stress)* [1]			*Allowable Uplift Capacity*
			Dead Wt[2]	*Side Resistance*	*Total*	
2'-6"	-	-55 CCD (68 ft)	35 kip	360 kip	396 kip	198 kip
2'-6"	5'-0"		160 kip	337 kip	497 kip	248 kip

Notes:

1. Shafts in cohesive soil are designed by total stress methods for undrained (short term) loading conditions.
2. The total dead weight includes the total weight of soil and effective weight of concrete.
3. Shafts in cohesionless soil, and shafts subject to permanent uplift loads are designed by effective stress methods.

A factor of safety of 1.3 should be provided against uplift when resistance is determined solely from self-weight of the foundations. When side resistance is included in the determination of ultimate capacity, a nominal factor of safety of 2 should be applied.

4.2.2 Material Parameters for LPile Analyses

Material parameters for use in LPile are provided in Table 2. The soil profile used in the analysis should be assumed to start at the top of shaft elevation. Soil or fill (except CL-SM flowable cementous fill) materials above the top of shaft should be ignored. The soil profile should extend at least 2 diameters below the bearing elevation of the caisson.

LPile requires input of effective unit weights. The effective unit weight for each material can be determined by subtracting the unit weight of water, γ_w = 62.4 pcf, from the total unit weights provided in Table 2. Separate layers should be provided for soil units which are above the water table (in this case the effective unit weight is the total unit weight), and below the water table.

The majority of the lateral resistance is developed in the top 6 to 12 shaft diameters. For ease of analysis, the caisson should be modeled as a straight shaft. Deflections at the caisson bell elevation are relatively small and inclusion of the bell geometry will not result in an appreciable increase in lateral capacity.

A fence diagram is provided in Appendix A of this report indicating the interpreted limits of the geologic units. The caisson locations should be checked against the boring logs and the fence diagram to verify that the typical profile elevations provided in the parameter table are representative.

Caisson shafts are conventionally modeled using free- and fixed-headed boundary conditions. Because the vertical compression load tends to be beneficial at small deflections, it is commonly set to zero to be conservative. A free-headed analysis is generally applied to cases where a pile or shaft extends above the ground line, or it can be conservatively applied when only minimum reinforcement is provided between the caisson and the cap or pier. A pile fully embedded in a concrete cap could be modeled using fixed-headed boundary conditions. The loading in this case would consist of a lateral shear force and a slope (set equal to zero) at the pile head, and a vertical compression load. In most cases, the actual pile response will be somewhere between the values predicted for the fixed-headed and free-headed boundary conditions. The input boundary conditions are used by LPile for the solution of the finite difference equations which model the pile as a beam-column. Despite the similarity of the terms, they should not be confused with support conditions as defined by classical mechanics of materials.

4.2.3 Squeeze Potential

Our experience has indicated that soft clay squeeze into a caisson shaft excavation can be correlated with the ratio of total overburden pressure to undisturbed in-situ strength. A general guideline for the likelihood of squeeze as a function of caisson shaft radius and depth is tabulated below.

Table 7: Caisson shaft squeeze potential

Depth to Dia Ratio: $\frac{d}{R_{shaft}}$	*Min. Strength Ratio:* $\frac{\sigma_v}{S_u}$
4	5
8	6
12	6.5
16	7
20	7.5
24	8
28	8*
32	8*

Note: * CDOB limits the strength ratio to a maximum value of 8 in the analyses

To use the table, first calculate the ratio of depth to the design shaft radius for the point of interest using consistent units. Second, compare the overburden pressure to the average undrained shear strength at that depth, again using consistent units. If the calculated pressure to strength ratio is greater than the tabulated limiting value, shaft squeeze is likely at that depth.

Based on the results of in-situ vane shear testing, squeeze would not be expected in any shaft excavations 5 feet in diameter or smaller. Copies of the squeeze calculations are provided in Appendix B.

4.2.4 General Caisson Construction Considerations

To prevent surface soils from sloughing into the caisson shaft, and inflows from surface runoff and the shallow water table, it is recommended that temporary casing be provided through the fill and sand extending at least 3 feet into the underlying clay (approximately elevation +6 to +8 CCD). Insofar as possible, the casing should be pushed ahead of the drill excavation. For safety, it is common for the top casing to project 42 inches above the surface working grade.

It is standard practice for the City of Chicago to require inspection of caissons by the geotechnical engineer of record. A representative of GEI should be present during all phases of caisson construction to observe that the excavations have reached a suitable bearing stratum as recommended in the design. The field inspector can also review contractor procedures if groundwater, soil squeeze or obstructions are encountered. Without this oversight and special testing, we cannot be responsible for misinterpretations of our data, our analyses, our recommendations, or how these items are incorporated into the final design. GEI does not support third-party inspections.

Caisson shafts should be a minimum of 30 inches in diameter. The Chicago Building Code requires that caisson bells be at least 12 inches thick at the design edge, and that the sides slope at no less than 60 degrees from the horizontal. The caisson bell diameter should not exceed 3 times the shaft diameter.

Due to safety concerns, it is expected that the personnel will not be lowered into excavations to observe the base of the bell caisson excavation directly. For this reason, an explosion-proof camera should be lowered into the bell after final cleanup, to verify it is suitably free of loose material and debris. Alternatively, the caisson bell diameters can be oversized by 15%, up to a maximum increase of 1 foot.

Care should be taken to avoid caisson concrete hitting the sides of the shaft, or the rebar cage, if it is placed by the free-fall method. Caisson shafts and bell excavations should be clean of loose soil and as dry as practical prior to concrete placement. No more than 2 inches of standing water should be present at the bottom of the bell when the concrete is placed. Concrete slump should be in the range of 5 to 7 inches for free-fall placement, and between 7 to 9 inches when tremie methods are used. All concrete within 5 feet of placement grade should be consolidated by vibration.

4.3 Station Foundations: Spread Footing Foundations

The station with loads up to 120 kips could be supported by shallow spread-type footing foundations.

The urban fill encountered in the borings are not generally considered suitable for foundation support. Footings should be founded on properly compacted structural fill over native sand or clay crust. No footing shall be founded on urban fill due to its heterogeneous characters and uncontrolled manner of placement after the Great Chicago Fire.

Shallow spread footings bearing on undisturbed natural loose to medium dense sand and stiff gray clay, or properly compacted structural fill may be designed using a maximum net allowable soil bearing pressure of 3,000 psf. This is the maximum pressure that should be transmitted to the bearing soils in excess of the minimum surrounding overburden pressure.

The natural suitable soil bearing layers were encountered in Borings B-102, B-105 and B-5 below the fill at depths of 3 to 6 feet below the existing ground surface.

The footings should be placed on natural soil or on fill that extends to the suitable natural soil. Where foundations bear in the loose to medium dense sand, a smooth bladed excavator bucket should be used to limit the surface disturbance of the sand as much as possible. The sand subgrade should be recompacted.

Where overexcavation below design foundation subgrade is required, the foundation excavations should be backfilled with compacted fill, flowable fill (CLSM), or lean concrete. The over-excavation should extend to a suitable native soil bearing material, and in all directions at least 12 inches beyond the edges of the footings for each 12 inches of over excavated depth below the footing level. The over excavation should be backfilled in lifts with a compacted well-graded granular material, containing less than 12% by weight passing the No. 200 (0.075 mm) sieve (preferably IDOT grade CA-6). This material should be

placed in thin lifts not exceeding 9 inches in loose thickness, and it should be compacted to a minimum of 95% of its maximum dry density as determined by the modified Proctor test (ASTM D 1557). Thinner lifts should be used where material is compacted with light or walk-behind equipment.

Lateral overexcavation described above is not required if CLSM or lean concrete is utilized as backfill.

At the maximum bearing pressures, the total maximum settlement of footing foundations designed and constructed as recommended above are estimated to be about 1-1/4 inch for pier footings with a maximum dimension of 7 feet and continuous footings with a maximum dimension of 4 feet. Differential settlements are possible due to varying foundation loads and support conditions, but are estimated to be less than about ½ inch.

Footings placed in unheated areas should be embedded a minimum of 4 feet below finished grade to provide for adequate frost protection. Individual column footings should have a minimum width of 30 inches, and continuous wall footings should have a minimum width of 18 inches to prevent disproportionately small footing sizes.

4.3.1 Sliding Resistance

The resistance to sliding of footings and grade beams can be evaluated using the earth pressure coefficients and interface friction value tabulated below. Backfill against grade beams and footings should be placed in thin lifts, not exceeding 12 inches in loose thickness, and it should be compacted to 95% of the materials maximum dry density as determined by the modified Proctor test.

Table 8: Earth pressure coefficients and interface friction values

	Interface Friction Factor, tan δ	*Earth Pressure Coefficients*		
		Active, K_a	*Passive, K_p*	*At-Rest, K_0*
Granular Backfill				
(Sides of Grade Beams and Core Mats)	0.45	0.25	3.85	0.40
Footings				
(Mass Concrete on New Fill)	0.55	-	-	-
(Precast Concrete Against New Fill)	0.45	-	-	-
(Mass Concrete on Native Sand)	0.50	-	-	-
(Mass Concrete on Native Clay)	0.40	-	-	-

In the equation below, a reduction factor of 2 is applied to passive pressure against mats and grade beams to account for reduced mobilization at small deflections. To fully develop passive resistance would require deflections of 2.5 to 4 inches. A unit weight of 125 pcf can be assumed for the granular backfill.

Passive Resistance: $P_p = [\frac{1}{2}(\frac{k_p}{2} - k_a)\gamma H^2]$ (per unit width in direction of loading)

Sliding resistance on the sides of grade beams and mats should be calculated as the resultant confining (normal) stress over the height of the element times the interface friction angle, times the length of the element in the direction of loading, or

Side Resistance on Mat: $$P_s = \frac{\left[\frac{1}{2}k_a\gamma H_{mat}^2 \tan\delta L_{mat}\right]}{1.5}$$ (per element parallel to loading)

The equation above includes a reduction factor of 1.5 to account for strain compatibility. Because of the limited confining stress, it is recommended that side resistance be ignored for grade beams and mats less than 3 feet deep.

The resistance to sliding of footing foundations is determined as the vertical normal stress times the area of contact, times the interface friction factor. In the values tabulated above, it is assumed that footing foundations are constructed on tested and approved backfill or native sand and clay soils. A minimum factor of safety of 1.5 should be provided against sliding.

4.4 Slabs-on-Grade

We understand that the proposed floor slab will be located at, or near, existing site grade. The on-site non-cohesive soils that contain no organic material, or demolition debris can be used as structural fill under slabs, around grade beams and under pavements. On-site fill should be visually observed during excavation. Any debris or concrete pieces greater than six inches in diameter should be removed from the stockpiles.

Imported fill should consist of a well-graded granular material, containing less than 15% by weight passing the No. 200 (0.075 mm) sieve. This material should be placed in thin lifts not exceeding 9 inches in loose thickness, and it should be compacted to a minimum of 92% of its maximum dry density as determined by the Modified Proctor test (ASTM D 1557). In slab-on-grade areas which support loads in excess of 500 psf, heavy concentrated loads, or masonry partition walls, the fill should be compacted to a minimum of 95% of the dry density referenced above. Periodic density testing should be performed on any fill to document that density requirements have been met.

Floor slabs on grade should be isolated from foundations to permit relative displacement without cracking. Slabs of sufficient thickness should also be provided with adequate reinforcing and jointing to control minor slab cracking.

The modulus of subgrade reaction is dependent upon the nature of the soils supporting the slab and the provided thickness as tabulated below.

Table 9: Modulus of subgrade reaction for slab-on-grade

Subgrade Material	*Thickness*	*Modulus, k*
Existing Granular Fill	-	50 pci
New Granular Fill	6 in	65 pci
	12 in	100 pci
	24 in	175 pci

Floor slabs on grade should be isolated from foundations to permit relative displacement without cracking. Slabs of sufficient thickness should also be provided with adequate reinforcing and jointing to control minor slab cracking.

Slabs-on-grade bearing above the design water table at elevation +10 CCD do not require an underdrain.

4.5 Permanent Below Grade Walls

Permanent reinforced concrete walls, such as elevator pit walls, that extend below grade should be designed to support unbalanced earth, water and lateral pressures due to exterior surcharges. Taking into consideration the variation of the soil profile on the perimeter walls, the lateral pressure due to unbalanced soil and water can be approximated as:

Table 10: Equivalent fluid pressure for design of permanent below grade (non-yielding) walls

Elevation	*Mechanism*	*Equivalent Fluid Pressure*
Above Water Table (El. +10 CCD)	Soil	55 psf/ft
Below Water Table (Below El. +10 CCD)	Soil + Water	90 psf/ft

Any surcharge loads (due to adjacent roadways, crane pads, or floor slabs) or foundation pressures, within the area that projects upward from the base of the cut on a 45 degree angle should be included as additional lateral pressures on the retention system. A uniform surcharge of 250 psf (or an equivalent 2 feet of soil) should be applied to the ground surface to represent construction equipment or traffic loading. The lateral forces on the wall due to surcharges should be determined using an at-rest earth pressure coefficient, K_0, equal to 0.5.

Any shallow foundations adjacent to below grade walls should be included as localized surcharges. The stress beneath the footings should be assumed to extend outward and downward from the edges of the footings at a 2 vertical to 1 horizontal slope. The lateral pressure on the wall should be determined using an at-rest earth pressure coefficient, K_0 = 0.5, or:

$$p_{ftg} = K_0 q_{ftg} \frac{BL}{(B+z)(L+z)}$$

Where: K_0 = Coefficient of at-rest earth pressure (K_0 = 0.5)
q_{ftg} = Bearing pressure beneath footing

B = Width of footing
L = Length of footing
z = Depth below footing bearing level

Excavations which extend below the water table will require sump pumps with drainage trenches to provide a stable subgrade for construction. All formed walls should have external waterproofing. No exterior drainage is required for walls properly waterproofed and designed for the above-referenced earth pressures.

We anticipate that excavation side slopes less than 5 feet in height will likely remain stable at slopes of 1.5H:1V for short periods of time. Excavation side slopes remaining open for extended periods may require flatter side slopes. Regardless, all excavations should be performed in accordance with pertinent local, state, federal, and OSHA regulations.

4.6 Seismic Site Classification

In accordance with Standard 9 of ASCE 7: *Minimum Design Loads for Buildings and Other Structures*, we recommend that Site Classification D be used for seismic design based on site specific SPT tests, vane shear tests, and the laboratory shear strength measurements of recovered soil samples.

5. Limitations

This report was prepared for the exclusive use of Simpson Gumpertz & Heger for the proposed CTA Green Line Elevated Station and Lake and Damen in Chicago, Illinois. This report may require modification if there are any changes in the nature, design, or location of the proposed structures. We cannot accept responsibility for designs based on our recommendations unless we are engaged to review the final plans and specifications to evaluate whether any changes in the project affect the validity of our recommendations and whether our recommendations have been properly implemented in the design.

The recommendations in this report are based in part on the data obtained from the subsurface explorations. The nature and extent of variations between explorations may not become evident until construction. If variations from the anticipated conditions are encountered, it may be necessary to revise the recommendations in this report. Therefore, we recommend that GEI be engaged during construction to provide a full-time inspector during foundation installations during construction to: a) verify bell caisson and rock socket caisson foundations bearing conditions, b) check that the subsurface conditions exposed during construction are in general conformance with our design assumptions, and c) ascertain that, in general, the geotechnical aspects of the work are being performed in compliance with the contract documents.

It was not part of our scope to explore for or research the locations of buried utilities or other buried structures at the site. Before construction of foundations for the proposed structure, a diligent effort should be made to determine the presence and location of any buried structures including utilities. This effort should include a thorough review of available drawings and other records of the site use and facilities. If the presence of such structures is determined to be likely, GEI should be notified so that we may review and revise our recommendations, if appropriate.

Our professional services for this project have been performed in accordance with generally accepted engineering practices; no warranty, expressed or implied, is made.

Appendix A

Boring Location Plan

Geotechnical Fence Diagrams

Soil Boring Logs

General Notes and Sampling Procedures

Vane Shear Test Results

Pressuremeter Test Results

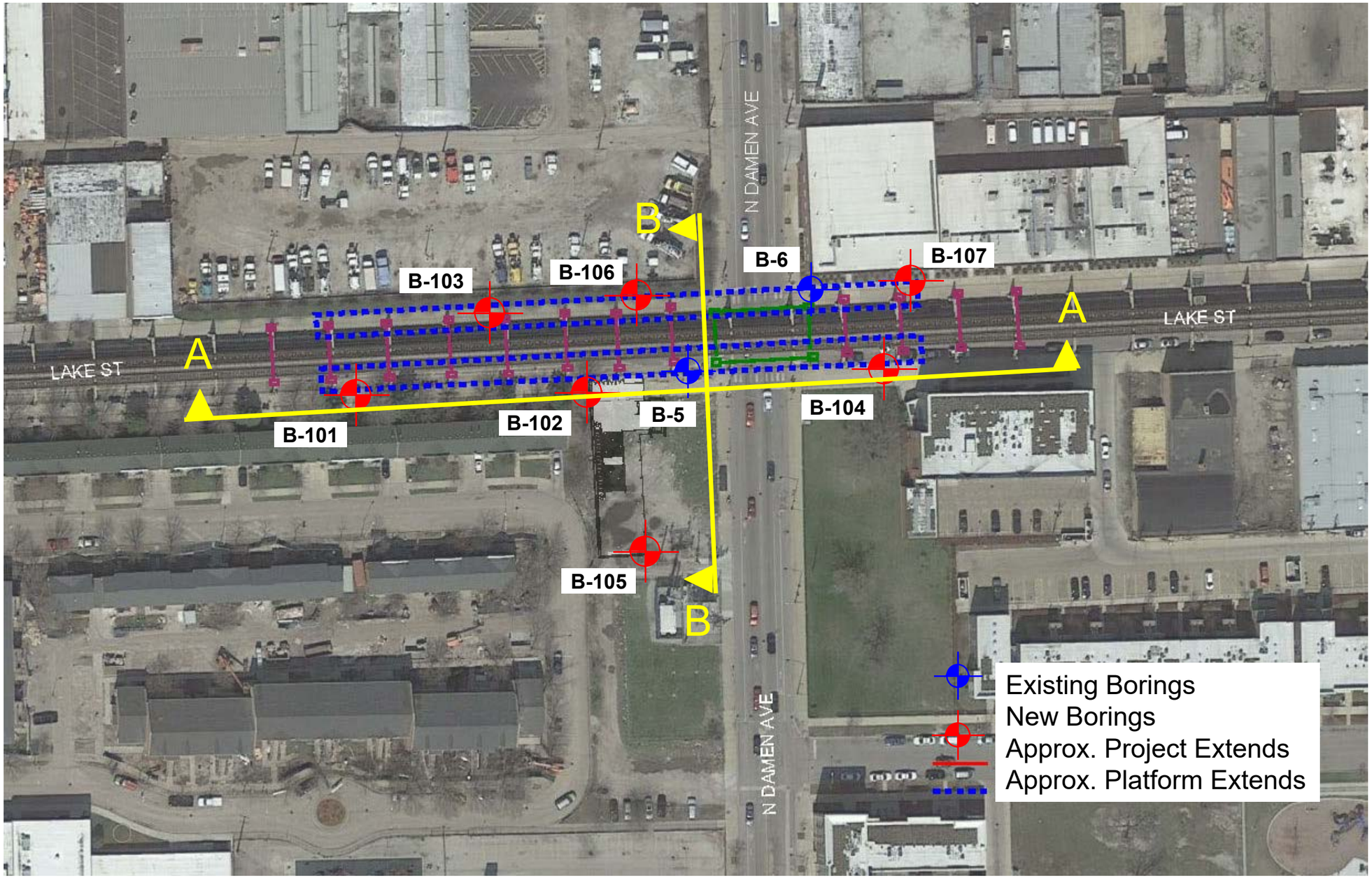
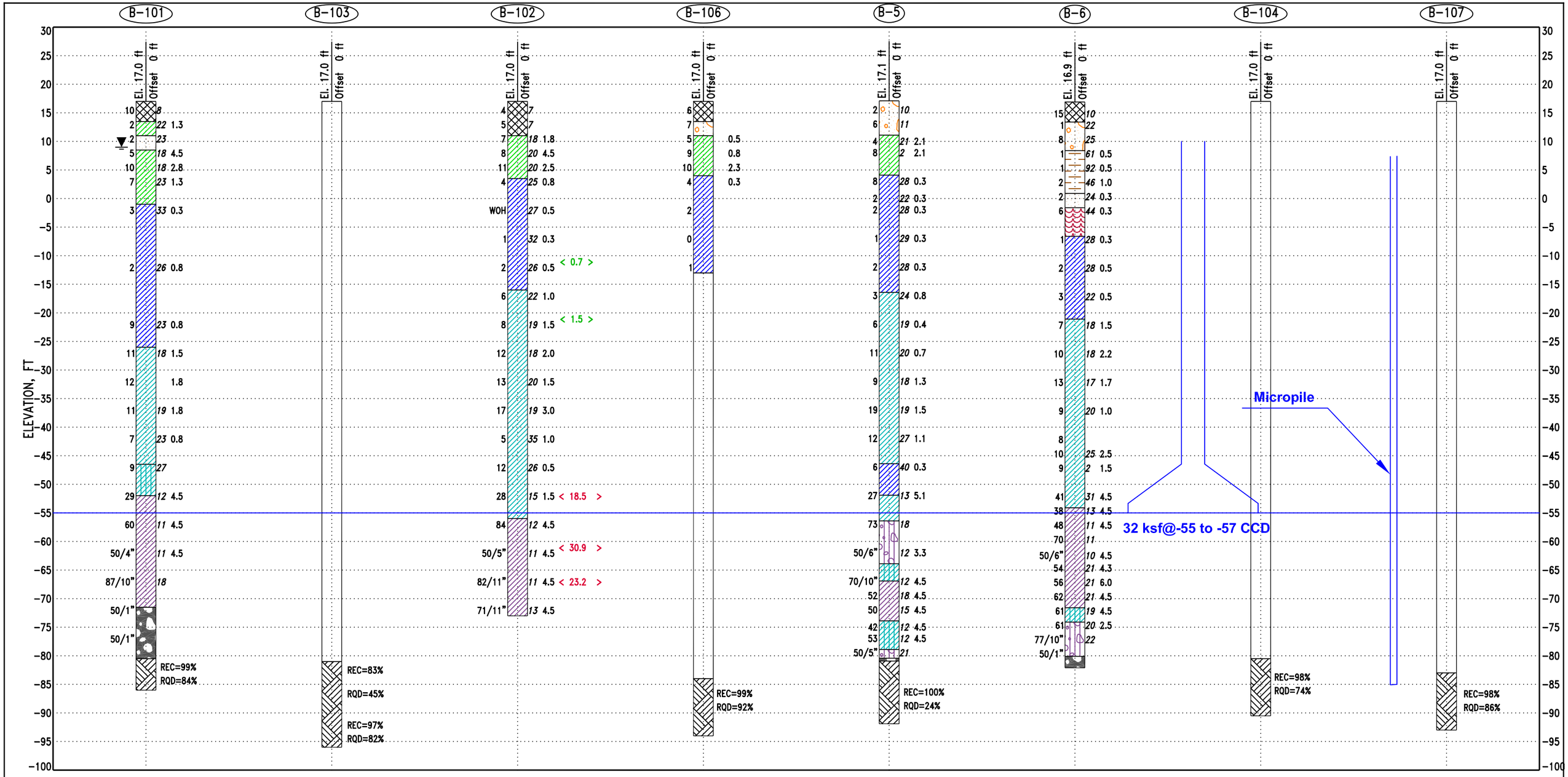


DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES

CTA Green Line Elevated Station **Chicago, IL**	GEI Consultants	**FIGURE 1** **BORING LOCATION DIAGRAM**
Simpson Gumpertz & Heger **Chicago, IL**	Project No. 1801815	June 2018



Legend

- BEDROCK
- CL
- OH
- BLDRCBBL
- FILL
- OL
- CL-ML
- SP
- MLG

Geological Units

- Glacial Lake Bottom
- Boldgett & Deerfield
- Park Ridge
- Tinley moraine
- Valparaiso moraine

B-1
11 35 2.5 <10.0> <0.75>
Pf, tsf (Pressuremeter)
su, ksf (Vane Shear)
su, ksf (QP)
wn, %
SPT (N), bpf

CTA Green Line Elevated Train Station
Chicago, IL

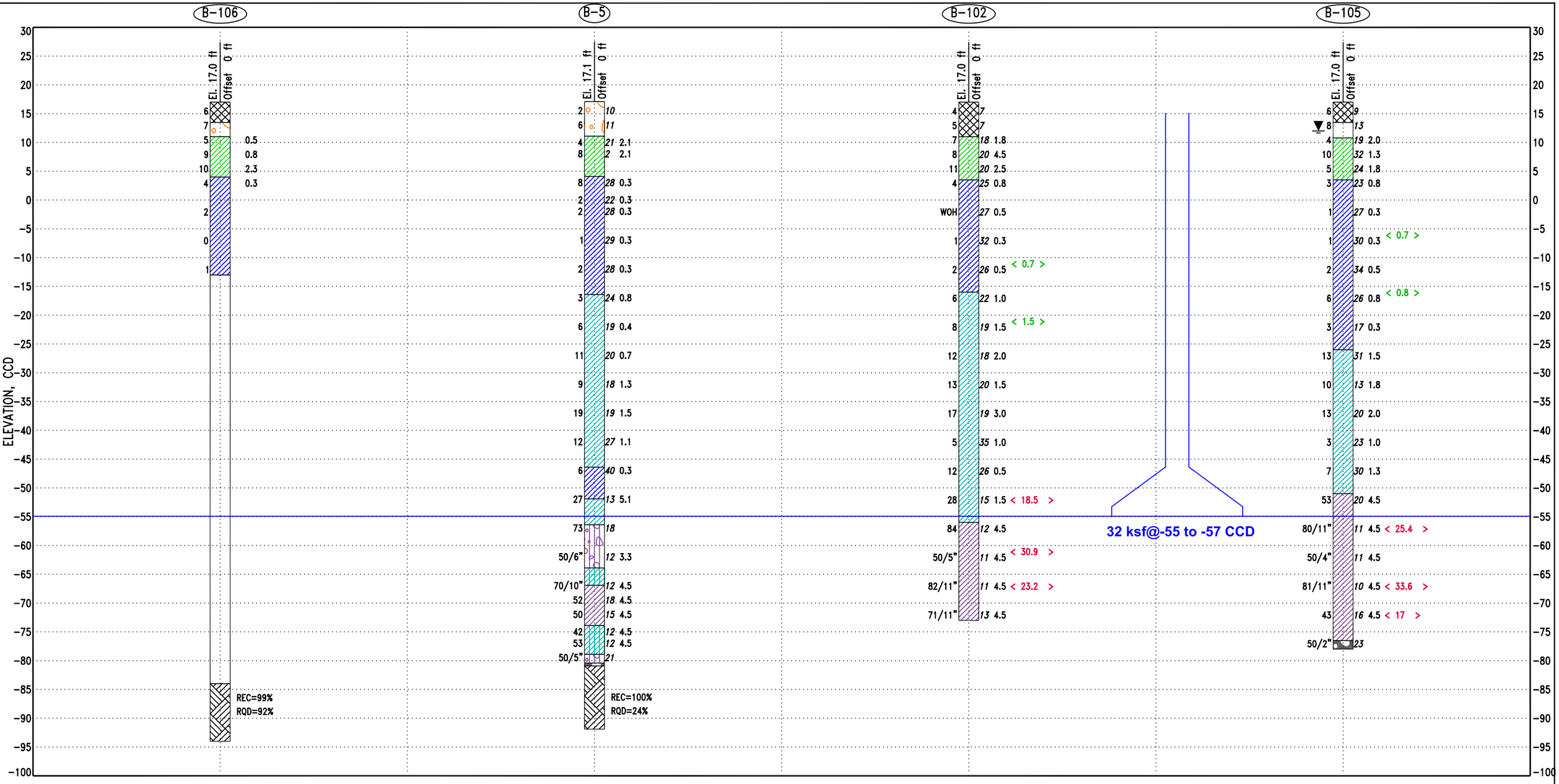
Simpson Gumpertz & Heger
Chicago, IL

GEI Consultants

Project: 1801815

Soil Profile
Section A-A

July 2018 Fig. 2



Legend

- FILL
- CL-ML
- SP
- CL
- BLDRCBBL
- MLG
- BEDROCK

Geological Units

- Glacial Lake Bottom
- Boldgett & Deerfield
- Park Ridge
- Tinley moraine
- Valparaiso moraine

B-1

11 — SPT (N), bpf

35 — wn, %

2.5 — su, ksf (QP)

<10.0> — su, ksf (Vane Shear)

<0.75> — Pf, tsf (Pressuremeter)

CTA Green Line Elevated Train Station
Chicago, IL

Simpson Gumpertz & Heger
Chicago, IL

GEI Consultants

Project: 1801815

Soil Profile

Section B-B

July 2018 Fig. 3

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-101**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

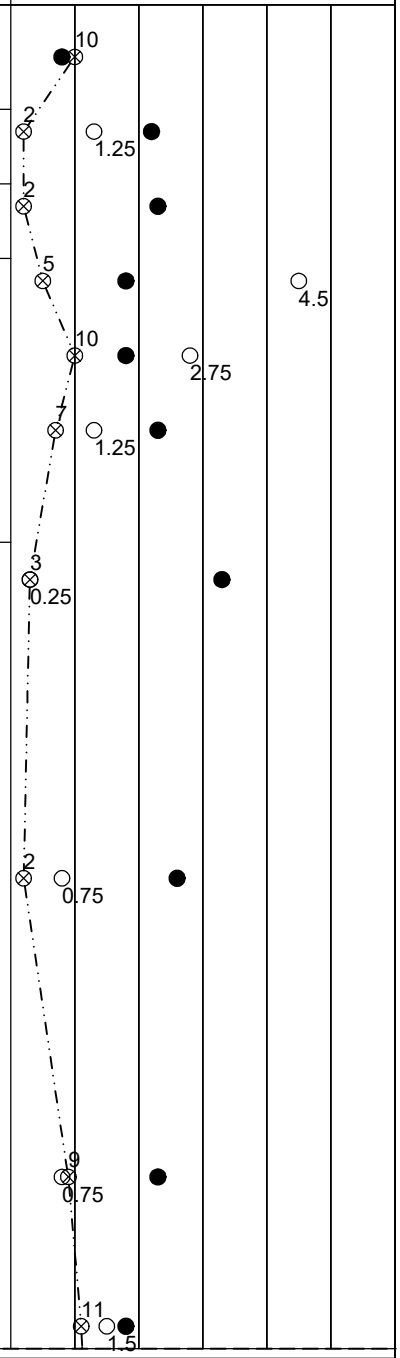
SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³
					*(0.0)*4" Concrete	
	1	SS			*(0.3)*Topsoil	
					*(1.0)*Fill: Fine to Coarse Sand & Gravel, with silt and brick fragments, dark brown	
5	2	SS			*(3.5)*Sandy Clay, with silt, trace gravel, brow, stiff (CL)	
10	3	SS			*(6.0)*Fine Sand, trace gravel, orange and brown, very loose, moist (SP)	
10	4	SS			*(8.5)*Silty Clay, trace sand and gravel, dark gray, very stiff to hard (CL)	
	5	SS				
	6	SS				
15 / 0						
20	7	SS			*(18.0)*Silty Clay, trace sand and gravel, dark gray, soft to medium (CL)	
	8	ST				
25 / -10						
30	9	SS				
	10	ST				
35 / -20						
40	11	SS				
	12	SS			*(43.0)*Silty Clay, trace sand and gravel, dark gray, stiff (CL)	

UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (1 2 3 4 5)

PLASTIC LIMIT (%) / WATER CONTENT (%) / LIQUID LIMIT (%) (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT (10 20 30 40 50 60)



The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: 8' While Sampling	BORING STARTED **5/22/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **5/22/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) / Norm**	GEI PROJECT NO. **1801815**	PAGE NO. **1** OF **3**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ TPL_GEI_MIDWEST_STABLE.GDT 7/5/18

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-101**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³
-30 / 50	13	SS				
-40 / 55	14	SS				
-40 / 60	15	SS				
-50 / 65	16	SS			*(63.5)*Clayey Silt, trace sand and gravel, dark gray, stiff (CL-ML)	
-50 / 70	17	SS			*(69.0)*Silty Clay, trace sand and gravel, dark gray, very stiff to hard (CL)	
-60 / 75	18	SS				
-60 / 80	19	SS				
-70 / 85	20	SS			Driller's note: boulder and cobble seams from 85 to 96 feet Driller's note: 100% water loss at about 87 feet	
-70	21	SS			*(88.5)*Rock Fragments	

UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (1 2 3 4 5)

PLASTIC LIMIT (%) WATER CONTENT (%) LIQUID LIMIT (%) (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT (10 20 30 40 50 60)

12, 1.75; 11, 1.75; 7, 0.75; 9; 29; 4.5+; 60; 4.5+; 50/4", 4.5+; 87/10"; 50/1"

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: 8' While Sampling	BORING STARTED **5/22/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **5/22/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) / Norm**	GEI PROJECT NO. **1801815**	PAGE NO. **2** OF **3**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ_TPL_GEI_MIDWEST_STABLE.GDT 7/5/18

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-101**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³	UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (1 2 3 4 5) / PLASTIC LIMIT (%) WATER CONTENT (%) LIQUID LIMIT (%) (10 20 30 40 50) / STANDARD PENETRATION BLOWS/FT (10 20 30 40 50 60)
95 / -80	22	SS			Driller's note: Top of rock		50/1"
100					*(97.5)*DOLOMITE, light gray, fresh, occasional horizontal joints Run # 1 — Depth ft. 97.5-103 — Recovery % 99 — RQD % 84		
105 / -90					103 End of Boring Boring advanced with a rock bit and drilling fluid. 10 feet of 4 inch casing was installed. Standard Penetration Tests performed with an automatic hammer. Boring grouted upon completion.		
110							
115 / -100							
120							
125 / -110							
130							

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: 8' While Sampling	BORING STARTED **5/22/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **5/22/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) / Norm**	GEI PROJECT NO. **1801815**	PAGE NO. **3** OF **3**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ_TPL_GEI_MIDWEST_STABLE.GDT 7/5/18

DRILL# B-101
BOX#
FROM: 97.5'
TO: 103.0'

Job # 18043

of 1

5-25-18

PROPERTY

97.5
↓

103'

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-102**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

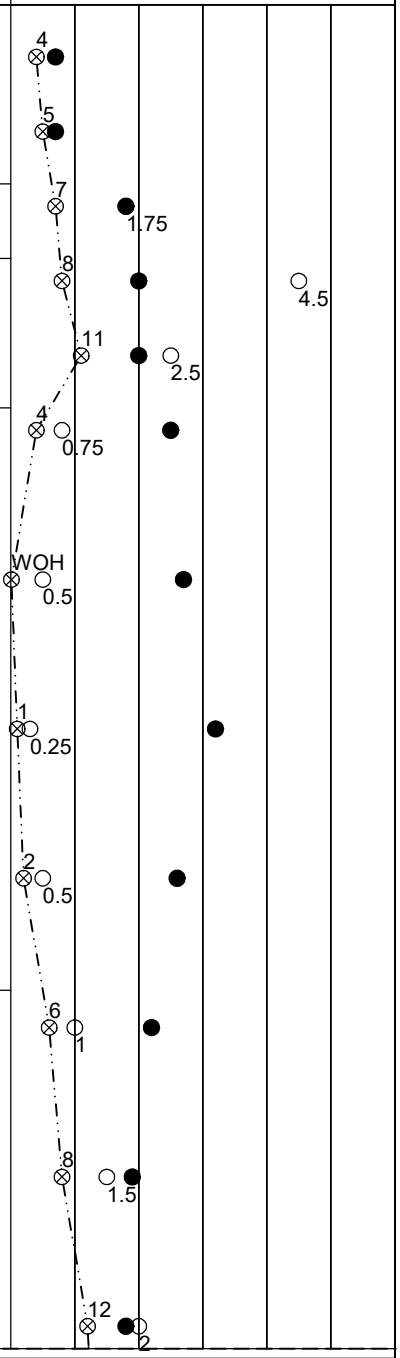
SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³
					*(0.0)*5" Concrete	
	1	SS			*(0.4)*Fill: Sand and Gravel, with silt and brick fragments, dark brown	
	2	SS			*(3.5)*Fill: Well Graded Fine Sand, orange, moist	
5	3	SS			*(6.0)*Sandy Clay, with silt, trace gravel, brown, stiff (CL)	
10	4	SS			*(8.5)*Silty Clay, trace sand and gravel, brownish gray, very stiff to hard (CL)	
	5	SS				
	6	SS			*(13.5)*Silty Clay, trace sand and gravel, brownish gray, soft to medium (CL)	
15 / 0	7	SS				
20	8	ST				
25 / -10	9	SS			**Vane Shear Test performed at 27.5 ft s_u^{peak} = 650 psf -- s_u^{res} = 325 psf**	
30	10	ST			*(33.0)*Silty Clay, trace sand and gravel, brownish gray, stiff to very stiff (CL)	
35 / -20	11	SS			**Vane Shear Test performed at 37.5 ft s_u^{peak} = 1500 psf -- s_u^{res} = 825 psf**	
40	12	SS				

UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (1 2 3 4 5)

PLASTIC LIMIT (%) / WATER CONTENT (%) / LIQUID LIMIT (%) (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT (10 20 30 40 50 60)



The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: Not Encountered	BORING STARTED **6/1/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **6/4/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) / Ted**	GEI PROJECT NO. **1801815**	PAGE NO. **1** OF **3**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ TPL_GEI_MIDWEST_STABLE.GDT 7/11/18

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-102**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³
-30 / 50	13	SS				
-40 / 55	14	SS				
-50 / 60	15	SS				
-60 / 65	16	SS				
-70 / 70	17	SS			**Pressuremeter Test performed at 68.5 to 71.0 ft** **P_f = 18.5 tsf -- E_d = 207.0 tsf**	
-75	18	SS			*(73.0)*Silty Clay, trace sand and gravel, brownish gray, hard (CL)	
-60 / 75	19	SS			**Pressuremeter Test performed at 77.5 to 80.0 ft** **P_f = 30.9 tsf -- E_d = 599.0 tsf**	
-80 / 80	20	SS			**Pressuremeter Test performed at 83.5 to 86.0 ft** **P_f = 23.2 tsf -- E_d = 581.0 tsf**	
-70 / 85	21	SS				

UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (1 2 3 4 5)

PLASTIC LIMIT (%) WATER CONTENT (%) LIQUID LIMIT (%) (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT (10 20 30 40 50 60)

13 1.5 17 3 5 1 12 0.5 28 1.5 84 4.5+ 50/5" 4.5+ 82/11" 4.5+ 71/11" 4.5+

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: Not Encountered	BORING STARTED **6/1/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **6/4/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) / Ted**	GEI PROJECT NO. **1801815**	PAGE NO. **2** OF **3**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ_TPL_GEI_MIDWEST_STABLE.GDT 7/11/18

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-102**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³	UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (1 2 3 4 5) / PLASTIC LIMIT (%) WATER CONTENT (%) LIQUID LIMIT (%) (10 20 30 40 50) / STANDARD PENETRATION BLOWS/FT (10 20 30 40 50 60)
95 / -80					90 End of Boring Boring advanced with a rock bit and drilling fluid. 10 feet of 4 inch casing was installed. Standard Penetration Tests performed with an automatic hammer. Boring grouted upon completion.		
100							
105 / -90							
110							
115 / -100							
120							
125 / -110							
130							

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: Not Encountered	BORING STARTED **6/1/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **6/4/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) / Ted**	GEI PROJECT NO. **1801815**	PAGE NO. **3** OF **3**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ_TPL_GEI_MIDWEST_STABLE.GDT 7/11/18

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-103**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³
95 / -80					Blank Drill	
100 / -85					*(98.0)*DOLOMITE, light gray, fresh, occasional horizontal joints, vuggy Run # 1 — Depth ft. 98-108 — Recovery % 83 — RQD % 45	
105 / -90						
110 / -95					*(108.0)*DOLOMITE, light gray, fresh, occasional horizontal joints Run # 2 — Depth ft. 108-113 — Recovery % 97 — RQD % 82	
115 / -100					113 End of Boring Boring advanced with a rock bit and drilling fluid. Boring grouted upon completion.	
120 / -105						
125 / -110						
130 / -115						

○ UNCONFINED COMPRESSIVE STRENGTH TONS/FT² — 1 2 3 4 5

PLASTIC LIMIT (%) — WATER CONTENT (%) — LIQUID LIMIT (%) — 10 20 30 40 50

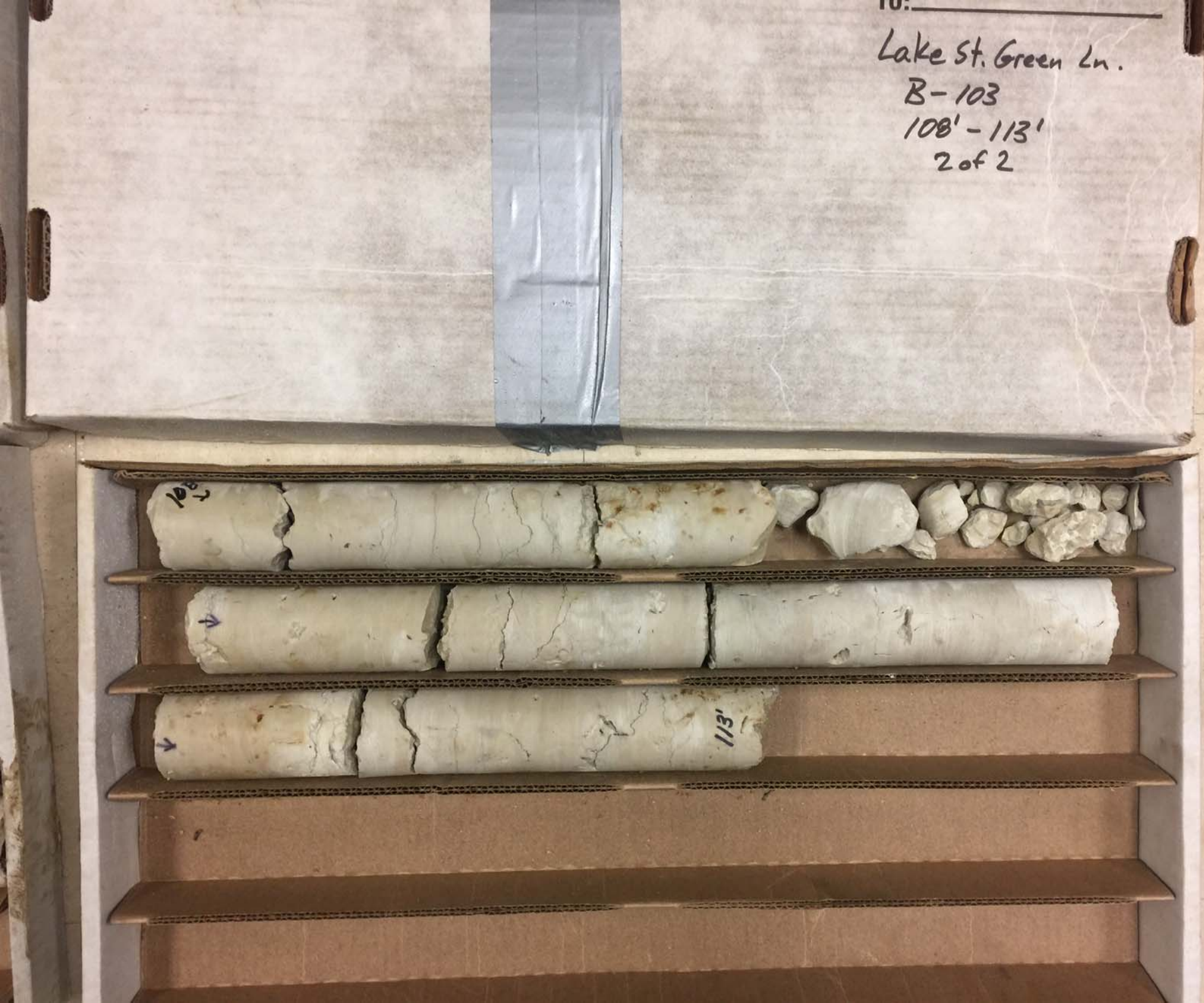
⊗ STANDARD PENETRATION BLOWS/FT — 10 20 30 40 50 60

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: Not Encountered	BORING STARTED **6/8/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **6/9/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) /**	GEI PROJECT NO. **1801815**	PAGE NO. **1** OF **13**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ TPL_GEI_MIDWEST_STABLE.GDT 7/11/18

Lake St. Green Ln.
B-103
98'-108'
1 of 2


Lake St. Green Ln.
B-103
108' - 113'
2 of 2
113'

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-104**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³
					Blank Drill	
95 / -80					*(97.5)*DOLOMITE, light gray, fresh, occasional horizontal joints, vuggy Run # 1 — Depth ft. 97.5-103 — Recovery % 97.5 — RQD % 74	
105 / -90					107.5 End of Boring Boring advanced with a rock bit and drilling fluid. Boring grouted upon completion.	
110 / -100						
115 / -110						
120 / 125 / 130						

UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (○): 1 2 3 4 5

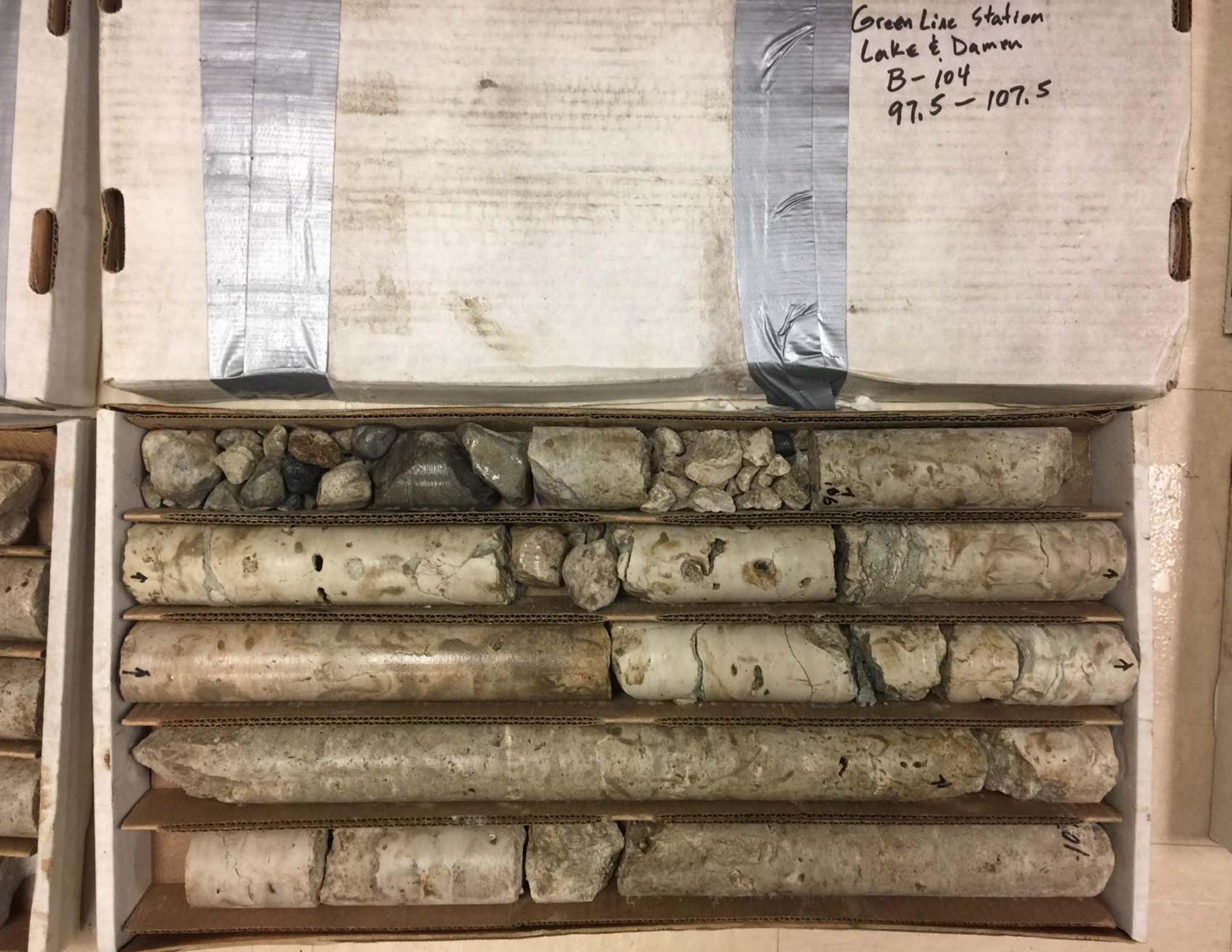
PLASTIC LIMIT (%) (×) — WATER CONTENT (%) (●) — LIQUID LIMIT (%) (△): 10 20 30 40 50

STANDARD PENETRATION BLOWS/FT (⊗): 10 20 30 40 50 60

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL:	BORING STARTED **6/6/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **6/7/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) /**	GEI PROJECT NO. **1801815**	PAGE NO. **1** OF **1**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ TPL_GEI_MIDWEST_STABLE.GDT 7/5/18


Green Line Station
Lake & Damen
B-104
97.5 – 107.5

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-105**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

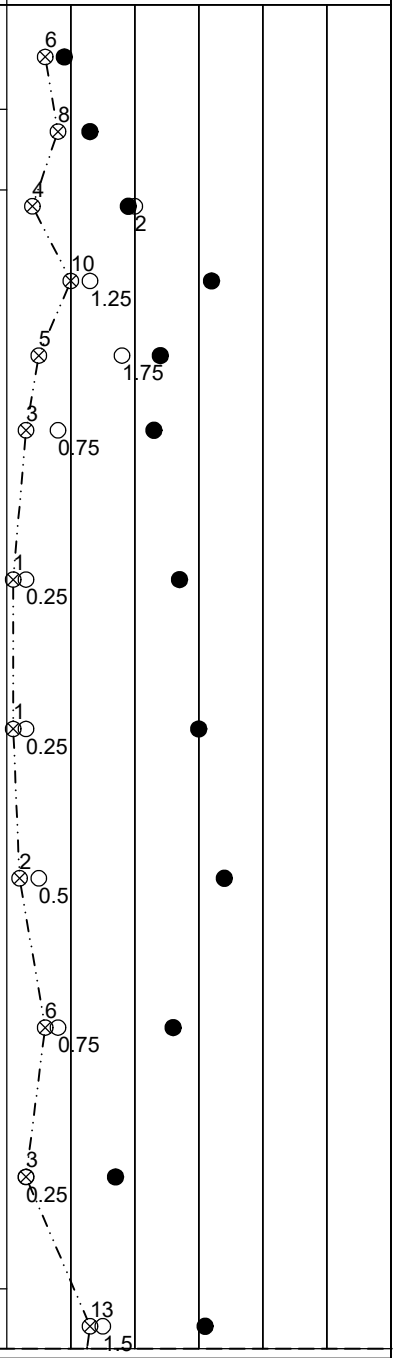
SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³
					*(0.0)*Gravel & Topsoil	
	1	SS			*(1.0)*Fill: Well Graded Fine Sand, orange, moist	
5	2	SS			*(3.5)*Fine Sand, trace gravel, brown, medium dense. brown (SP)	
10	3	SS			*(6.2)*Silty Clay, trace sand and gravel, gray, stiff (CL)	
10	4	SS				
	5	SS				
15	6	SS			*(13.5)*Silty Clay, trace sand and gravel, gray, soft to medium (CL)	
0						
20	7	SS				
	8	ST			**Vane Shear Test performed at 22.5 ft s_u^{peak} = 700 psf -- s_u^{res} = 200 psf**	
25						
-10	9	SS				
30					**Vane Shear Test performed at 32.5 ft s_u^{peak} = 800 psf -- s_u^{res} = 275 psf**	
35	10	ST				
-20						
40	11	SS				
	12	SS			*(43.0)*Silty Clay, trace sand and gravel, gray, stiff (CL)	

UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (1 2 3 4 5)

PLASTIC LIMIT (%) / WATER CONTENT (%) / LIQUID LIMIT (%) (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT (10 20 30 40 50 60)



The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: 5' While Sampling	BORING STARTED **5/31/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **5/31/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) / Ted**	GEI PROJECT NO. **1801815**	PAGE NO. **1** OF **3**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ TPL_GEI_MIDWEST_STABLE.GDT 7/5/18

GEI Consultants	CLIENT: **Simpson Gumpertz & Heger**	LOG OF BORING NUMBER **B-105**
	PROJECT NAME: **CTA Green Line Elevated Train Station**	ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

SURFACE ELEVATION (ft.) 17.0

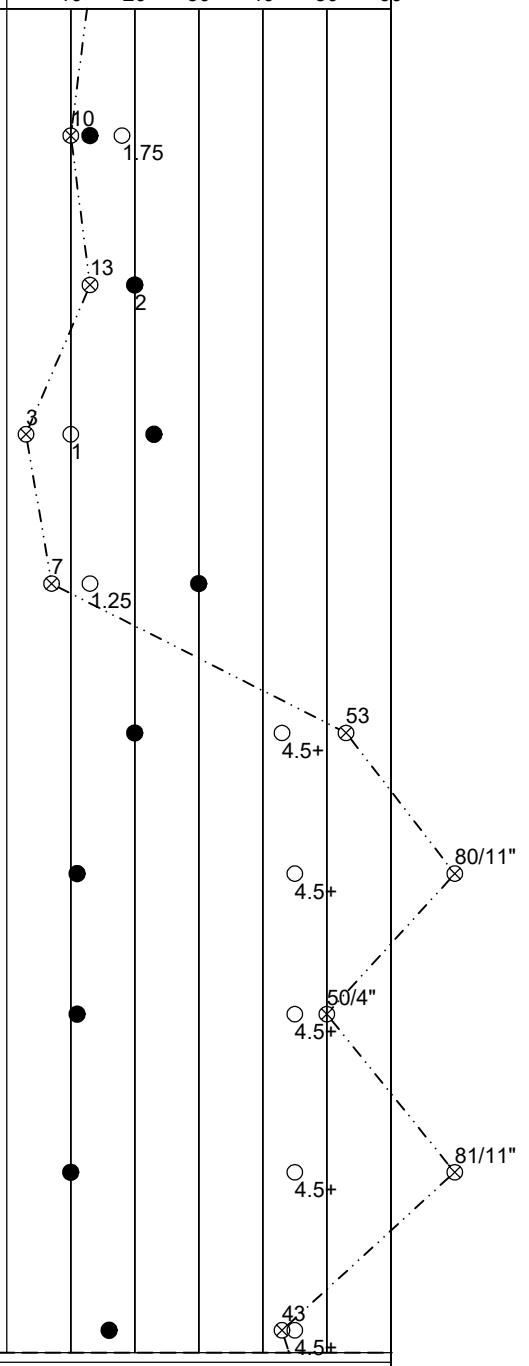
DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL
-30 / 50	13	SS			
-40 / 55	14	SS			
-50 / 60	15	SS			
-60 / 65	16	SS			
-70 / 70	17	SS			*(68.0)*Silty Clay, trace sand and gravel, gray, hard (CL)
-80 / 75	18	SS			**Pressuremeter Test performed at 73.5 to 76.0 ft P_f = 25.4 tsf -- E_d = 318.0 tsf**
-90 / 80	19	SS			
-100 / 85	20	SS			**Pressuremeter Test performed at 83.5 to 86.0 ft P_f = 33.6 tsf -- E_d = 490.0 tsf**
-110 / 90	21	SS			

UNIT DRY WT. LBS/FT^3

UNCONFINED COMPRESSIVE STRENGTH TONS/FT^2 (1 2 3 4 5)

PLASTIC LIMIT (%) / WATER CONTENT (%) / LIQUID LIMIT (%) (10 20 30 40 50)

STANDARD PENETRATION BLOWS/FT (10 20 30 40 50 60)



The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: 5' While Sampling	BORING STARTED **5/31/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **5/31/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) / Ted**	GEI PROJECT NO. **1801815**	PAGE NO. **2** OF **3**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ_TPL_GEI_MIDWEST_STABLE.GDT 7/5/18

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-105**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³	UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (1 2 3 4 5) / PLASTIC LIMIT (%) WATER CONTENT (%) LIQUID LIMIT (%) (10 20 30 40 50) / STANDARD PENETRATION BLOWS/FT (10 20 30 40 50 60)
					Pressuremeter Test performed at 88.5 to 91.0 ft P_f = 17.0 tsf -- E_d = 284.0 tsf		
95	22	SS			*(93.5)*Rock Fragments		50/2"
					95 End of Boring Boring advanced with a rock bit and drilling fluid. 10 feet of 4 inch casing was installed. Standard Penetration Tests performed with an automatic hammer. Boring grouted upon completion.		

-80 -90 -100 -110

100 105 110 115 120 125 130

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: 5' While Sampling	BORING STARTED **5/31/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **5/31/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) / Ted**	GEI PROJECT NO. **1801815**	PAGE NO. **3** OF **3**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ_TPL_GEI_MIDWEST_STABLE.GDT 7/5/18

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-106**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

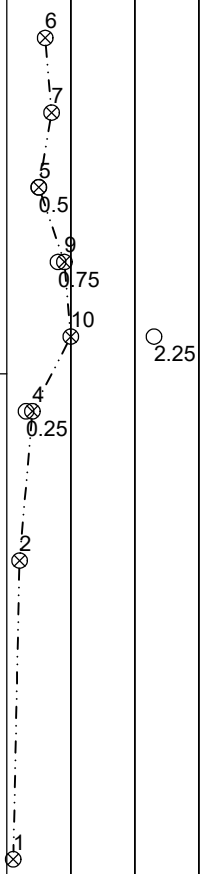
SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³
					*(0.0)*6" Concrete	
	1	SS			*(0.5)*Fill: Sand and Gravel	
	2	SS			*(3.5)*Silty Clay, trace sand and ravel, gray, medium to stiff (CL)	
5 / 10	3	SS				
	4	SS				
10	5	SS				
	6	SS			*(13.0)*Silty Clay, trace sand and ravel, gray, soft to medium (CL)	
15 / 0	7	SS				
20	8	SS				
25 / -10	9	SS				
30					*(30.0)*Blank drill from 30 feet to top of rock	
35 / -20						
40						

UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (○): 1 2 3 4 5

PLASTIC LIMIT (%) (×) WATER CONTENT (%) (●) LIQUID LIMIT (%) (△): 10 20 30 40 50

STANDARD PENETRATION BLOWS/FT (⊗): 10 20 30 40 50 60



The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: Not Encountered	BORING STARTED **6/7/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **6/8/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) / Mark**	GEI PROJECT NO. **1801815**	PAGE NO. **1** OF **2**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ TPL_GEI_MIDWEST_STABLE.GDT 7/11/18

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-106**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³	UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (1 2 3 4 5) / PLASTIC LIMIT (%) WATER CONTENT (%) LIQUID LIMIT (%) (10 20 30 40 50) / STANDARD PENETRATION BLOWS/FT (10 20 30 40 50 60)
95 / -80							
100					*(101.0)*DOLOMITE, light gray, fresh, occasional horizontal joints, vuggy Run # 1 — Depth ft. 101-111 — Recovery % 99 — RQD % 92		
105 / -90							
110							
115 / -100					111 End of Boring Boring advanced with a rock bit and drilling fluid. Boring grouted upon completion.		
120							
125 / -110							
130							

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL: Not Encountered	BORING STARTED **6/7/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **6/8/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) / Mark**	GEI PROJECT NO. **1801815**	PAGE NO. **2** OF **2**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ TPL_GEI_MIDWEST_STABLE.GDT 7/11/18

FROM:

TO:

CTA Green Line
Lake & Damen
B-106
101'- 111'

PROPERTY

BOX NO.

COMPANY

PROPERTY

BOX NO.

GEI Consultants

CLIENT: **Simpson Gumpertz & Heger**

LOG OF BORING NUMBER **B-107**

PROJECT NAME: **CTA Green Line Elevated Train Station**

ENGINEER **Simpson Gumpertz & Heger**

LOCATION: Damen & Lake, Chicago, IL

SURFACE ELEVATION (ft.) 17.0

DEPTH (FT) / ELEVATION (FT)	SAMPLE NO.	SAMPLE TYPE	SAMPLE DISTANCE	RECOVERY	DESCRIPTION OF MATERIAL	UNIT DRY WT. LBS/FT³	UNCONFINED COMPRESSIVE STRENGTH TONS/FT² (1 2 3 4 5) / PLASTIC LIMIT (%) WATER CONTENT (%) LIQUID LIMIT (%) (10 20 30 40 50) / STANDARD PENETRATION BLOWS/FT (10 20 30 40 50 60)
95 / -80					Blank Drill		
100 / -85					*(100.0)*DOLOMITE, light gray, fresh, occasional clay filled joints, vuggy Run # 1 — Depth ft. 100-110 — Recovery % 97.5 — RQD % 86		
105 / -90							
110 / -95					110 End of Boring Boring advanced with a rock bit and drilling fluid. Boring grouted upon completion.		
115 / -100							
120 / -105							
125 / -110							
130 / -115							

The stratification lines represent the approximate boundary lines between soil types: in situ, the transition may be gradual.

WATER LEVEL:	BORING STARTED **6/9/2018**	GEI OFFICE **Chicago Area**	
	BORING COMPLETED **6/10/2018**	ENTERED BY **AF**	APPROVED BY **RCR**
NORTHING EASTING	RIG/FOREMAN **B-57 (Geo Services) /**	GEI PROJECT NO. **1801815**	PAGE NO. **1** OF **1**

MIDWEST BORING LOG - OFFICIAL- PLZ_CTA GREEN LINE.GPJ TPL_GEI_MIDWEST_STABLE.GDT 7/5/18

FROM:
TO:

Green Line CTA
Lake & Damen
B-107
100'-110'

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)398-1441 * FAX(847) 398-2376

STRUCTURE FOUNDATION BORING LOG

Project West Lake Street Improvements — OBA JOB NO. 99417
Route XX — CDOT Proj. No. B-7-106 — Date 06-05-00
Section XX — Location N. Canal St. to N. Western Ave. — Bored By RICH
County Cook — Chicago, Illinois — Checked By DOB

BORING NO. B-5

Station 36+15
Offset 28' R

Surface Water Elev. N/A
Groundwater Elevation XX
Groundwater Elevation XX
After Hours

Elevation / Depth	Description	Blow Counts	R (in)	Qu (tsf)	W (%)
+17.1 CCD	Ground Surface Elevation				
	3.0"CONCRETE 9.0"SILTY SAND & gravel	2			
+16.1					
	FINE SAND–trace gravel–grayish brown–very loose–fill	1 1		NP	10
+13.5		4			
	FINE SAND–trace gravel–brown–loose/ (SP)	3 3		NP	11
-5.0					
+10.1		2			99.7
	SILTY CLAY–trace sand & gravel–brown & gray–very stiff (CL)	1 3		2.1B	21
		1			115.7
-10.0		3 5		2.1B	19
		50/1"			
					NR
+3.6		5			
		4 4		<0.25P	28
-15.0					
		1			101.4
	SILTY CLAY–trace sand & gravel–gray–very soft to soft (CL) Wet	1 1		0.33B	22
		0			
		1 1		<0.25P	28
-20.0					
		1			
		0 1		<0.25P	29
-25.0					
	SILTY CLAY–trace sand & gravel–gray–very soft (CL) Wet	0			
-30.0		1 1		<0.25P	28
-16.4		1			
		1 2		0.75P	24
-35.0					
	SILTY CLAY–trace sand & gravel–gray–medium stiff (CL)	1			115.4
		3 3		0.42B	19
-40.0					
		3			111
		5 6		0.67B	20
-45.0					
-31.4		1			112.4
	SILTY CLAY–trace sand & gravel–gray–stiff (CL)	4 5		1.25B	18
-50.0					

N–Standard Penetration Test (ASTM D-1586)
R–Recovery in Inches

Type Failure
B–Bulge Failure S–Shear Failure
E–Estimated Value P–Penetrometer

Qu–Unconfined Compressive Strength (tsf)
W–Water Content, percent dry weight
NP–Non–Plastic

Unit wt. (pcf) noted in italics above w%

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)398-1441 * FAX(847) 398-2376

STRUCTURE FOUNDATION BORING LOG

Project West Lake Street Improvements — OBA JOB NO. 99417
Route X — CDOT Proj. No. B-7-106 — Date 06-05-00
Section X — Location N. Canal St. to N. Western Ave. — Bored By RICH
County cook — Chicago, Illinois — Checked By DOB

BORING NO. B-5

Station 36+15
Offset 28' R

Surface Water Elev. N/A
Groundwater Elevation XX
Groundwater Elevation XX After Hours

Blow Counts	R (in)	Qu (tsf)	W (%)	Description	Elev.
				SILTY CLAY–trace sand & gravel–gray–stiff (CL)	
5			13.8		
7 12		1.5B	19		−55.0
				SILTY CLAY–trace sand & gravel–gray–very soft (CL) Wet	−46.4
3			98		
5 7		1.1B	27		−60.0
3 3		<0.25P	40		−65.0
				SILTY CLAY–trace sand & gravel–gray–hard (CL)	−51.4
11			125		
10 17		5.1B	13		−70.0
				SILTY CLAY–trace sand & gravel–gray–hard (CL)	−56.4
14 27 46		NP	18	CLAYEY SILT to SILT–trace fine sand–gray–very dense (ML)	−75.0
				CLAYEY SILT to SILT–trace fine sand–gray–very dense (ML)	−80.0
				NOTE: (fractured rock from −78.5–81')	
50/6"					−63.9
				SILTY CLAY to CLAYEY SILT–some sand, gravel & fractured rock–gray–very dense (CL/ML)	−66.4
30 44 26/4"		4.5+P	12		−85.0
37				SILTY CLAY–trace sand & gravel–gray–hard (CL)	
25 27		4.5+P	18		
27					−73.9
25 25		4.5+P	15		−90.0
17 19 23		4.5+P	12		
19				SILTY CLAY to CLAYEY SILT–trace to some sand & gravel–gray–hard (CL/ML)	−78.9
17 36		4.5+P	12		−95.0
50/5"					
		NP	21	SILT–trace fine sand–gray–very dense (ML)	−80.4
				Apparent Bedrock	−80.9
				RUN 1 (−98.0' to −109.0'): Silurian System, Niagran Series; Racine Formation Dolomite.	−100.0

N–Standard Penetration Test (ASTM D-1586)
R–Recovery in Inches

Type Failure
B–Bulge Failure
E–Estimated Value
S–Shear Failure
P–Penetrometer

Qu–Unconfined Compressive Strength (tsf)
W–Water Content, percent dry weight
NP–Non–Plastic

Unit wt. (pcf) noted in italics above w%

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)398-1441 * FAX(847) 398-2376

STRUCTURE FOUNDATION BORING LOG

Project West Lake Street Improvements — OBA JOB NO. 99417
Route X — CDOT Proj. No. B-7-106 — Date 06-05-00
Section X — Location N. Canal St. to N. Western Ave. — Bored By RICH
County cook — Chicago, Illinois — Checked By DOB

BORING NO. B-5

Station 36+15
Offset 28' R

Surface Water Elev. N/A
Groundwater Elevation XX
Groundwater Elevation XX
After Hours

	Blow Counts	R (in)	Qu (tsf)	W (%)
Light gray and fine grained with horizontal bedding. Few small vugs with some pyrite inclusions. Stylolitic. Weathered to −104.0'. Numerous intersecting horizontzl and vertical fractures withh clay partings from −98.0' to −104.0'. Tight horizontal fracturing from −104.0' to −105.2'. Transverse fracture with thin clay parting at −105.4'. Horizontal fracture at −106.0'. Transverse fractures at −107.0' and −108.0'.				
−91.9				
END OF BORING @ −109.0' Rotary Drilling Methods 15.0' Casing Used				

−105.0 −110.0 −115.0 −120.0 −125.0 −130.0 −135.0 −140.0 −145.0 −150.0

N−Standard Penetration Test (ASTM D−1586)
R−Recovery in Inches
Type Failure
B−Bulge Failure S−Shear Failure
E−Estimated Value P−Penetrometer
Qu−Unconfined Compressive Strength (tsf)
W−Water Content, percent dry weight
NP−Non−Plastic
Unit wt. (pcf) noted in Italics above w%

O'BRIEN & ASSOCIATES, INC.
CONSULTING ENGINEERS
1235 E. DAVIS ST./ARLINGTON HTS., IL 60005
(847)398-1441 * FAX(847) 398-2376

ILLINOIS DEPARTMENT OF TRANSPORTATION
STRUCTURE ROCK CORING LOG

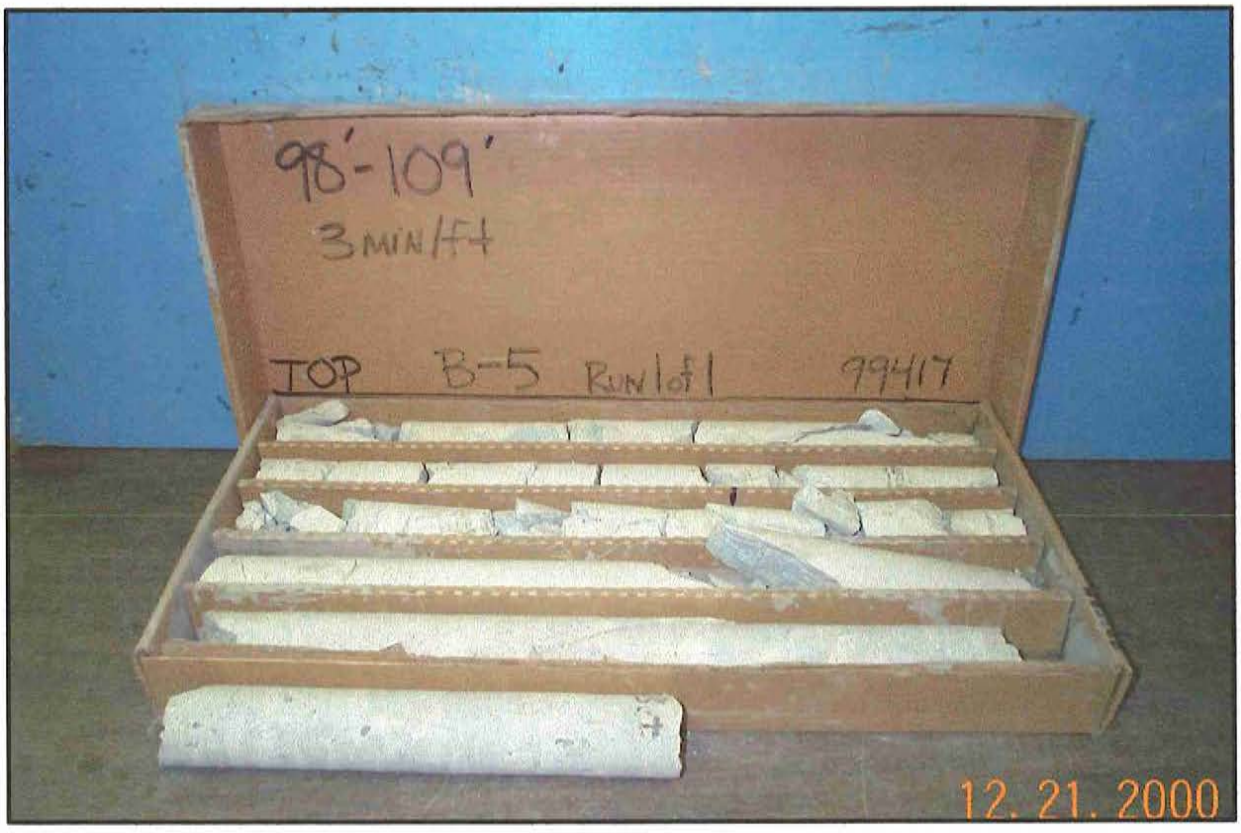
Sh 1 of 1

Project West Lake Street Improvements — OBA JOB NO. 99417
Route XX — CDOT Proj. No. B-7-106 — Date 6-5-00
Section XX — Location N. Canal St. to N. Western Ave. — Bored By RH
County Cook — Chicago, Illinois — Checked By DOB

Boring No. B-5
Station 36+15
Offset 28' R
Surface Elev. +17.1

Core Type NX
Core Diameter 2.0 in.
Core Length 11.0 ft.

Top Elev. (ft.)	CORING NOTES AND ROCK DESCRIPTION	CORE RUN (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (Min./ft.)	COMPRESSIVE STRENGHT (tsf)
-80.9	RUN 1 (-98.0' to -109.0'): Silurian System, Niagran Series, Racine Formation Dolomite. Light gray and fine grained with horizontal bedding. Few small vugs with some pyrite inclusions. Stylolitic. Weathered to -104.0'. Numerous intersecting horizontzl and vertical fractures withh clay partings from -98.0' to -104.0'. Tight horizontal fracturing from -104.0' to -105.2'. Transverse fracture with thin clay parting at -105.4'. Horizontal fracture at -106.0'. Transverse fractures at -107.0' and -108.0'.	1	100.0	23.9	3.0	N/A



Color Pictures of the Cores Yes

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STRUCTURE FOUNDATION BORING LOG

Project West Lake Street Improvements
Route XX
Section XX
County cook
CDOT Proj. No. B-7-106
Location N. Canal St. to N. Western Ave.
Chicago, Illinois

OBA JOB NO. 99417
Date 06-07-00
Bored By RICH
Checked By DOB

BORING NO. B-6

Station 37+22
Offset 28'L

Surface Water Elev. N/A
Groundwater Elevation XX
Groundwater Elevation XX
After Hours

Ground Surface Elevation *+16.9 CCD*

	Blow Counts	R (in)	Qu (tsf)	W (%)
5" CONCRETE, 37.0" CRUSHED STONE with Crushed Concrete & Brick	8			
	6			
	9		NP	10
+13.4				
	1			
	1			
-5.0	0		NP	22
SILTY SAND with crushed stone-trace brick & cinders (FILL)	2			
	1			
	7		NP	25
+8.4				
	0			
	1			
-10.0	0		0.5P	61
	1			
ORGANIC SILT-trace fibers-dark brown & gray (OL)	0			
	1		0.5P	92
	1			
	1			
-15.0	1		1.0P	46
+0.9				
	2			
CLAYEY SANDY SILT-trace organics brown & gray-very soft (SM)	1			
	1		<.25P	24
-1.6				
	2			
	3			
-20.0	3		<.25P	44
ORGANIC CLAYEY SILT-trace fibers-gray-very soft (OC/OH)				
-6.6				
SILTY CLAY-trace sand & gravel gray-very soft (CL) Wet	0			
	0			
-25.0	1		<.25P	28
SILTY CLAY-trace sand & gravel gray-very soft (CL) Wet	0			
	1			
-30.0	1		0.5P	28
-16.6				
	0			
	1			
-35.0	2		0.5P	22
SILTY CLAY-trace sand & gravel-gray-medium stiff to soft (CL)	1			
	3			
-40.0	4		1.5P	18
-26.6				
	3			*12* 2.2
	4			
-45.0	6		2,15B	18
SILTY CLAY-trace sand & gravel-gray-stiff to very stiff (CL)				
	4			*13* 3.6
	5			
-50.0	8		1.68	17

N-Standard Penetration Test (ASTM D-1586)
R-Recovery in Inches

Type Failure
B-Bulge Failure
E-Estimated Value
S-Shear Failure
P-Penetrometer

Qu-Unconfined Compressive Strength (tsf)
W-Water Content, percent dry weight
NP-Non-Plastic

Unit wt. (pcf) noted in Italics above w%

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STRUCTURE FOUNDATION BORING LOG

Project West Lake Street Improvements — OBA JOB NO. 99417
Route XX — CDOT Proj. No. B-7-106 — Date 06-05-00
Section XX — Location N. Canal St. to N. Western Ave. — Bored By RICH
County cook — Chicago, Illinois — Checked By DOB

BORING NO. B-6

Station 37+22
Offset 28'L

Surface Water Elev. N/A
Groundwater Elevation XX
Groundwater Elevation XX
After Hours

Elev.	Description	Blow Counts	R (in)	Qu (tsf)	W (%)
		3			
		3			
-55.0		6		1.0P	20
	SILTY CLAY-trace sand & gravel-gray-stiff to very stiff (CL)				
		2			
		4			
-60.0		4			NR
-44.1					
		3			
		5			
		5		2.5P	25
		3			
		5			
-65.0		4		1.5P	27
	SILT-trace fine sand-gray-dense to very dense (ML)				
		10			
		15			
-70.0		26		4.5+P	31
-54.1					
		11			
		15			
		23		4.5+P	13
	SILTY CLAY-trace to some sand & gravel-gray-hard (CL)				
		13			
		18			
-75.0		30		4.5+P	11
-59.1					
		24			
	SILTY SAND & GRAVEL-gray-very dense (CM)	37			
		33		NP	11
-61.6					
		50/6"			
-80.0				4.5+P	10
		11			116
		22			
	SILTY CLAY-trace sand & gravel-gray-hard (CL)	32		4.33B	21
		16			115.9
-85.0		26 30		6.01B	21
		18			
		26			
		36		4.5+P	21
-71.6					
		19			
-90.0	SILTY CLAY to CLAYEY SILT-trace sand & gravel-gray-hard (CL/ML)	25 36		4.5+P	19
-74.1					
		20			
		23			
		38		2.5P	20
	SILT-trace fine sand-gray-very dense (ML)	23			
		43			
-95.0		34/4"		NP	22
		50/1"			
-80.1					
					NR
	Apparent BEDROCK				
-82.1					
	END OF BORING @ -99.0'				
-100.0	Rotary Drilling to Completion				

N-Standard Penetration Test (ASTM D-1586)
R-Recovery in Inches

Type Failure
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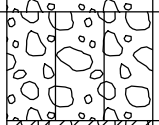
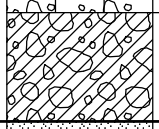
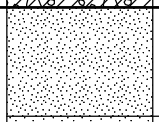
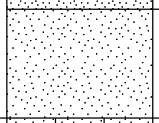
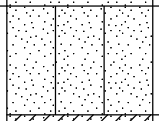
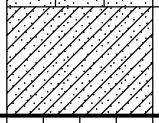
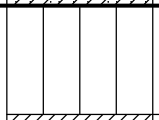
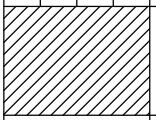
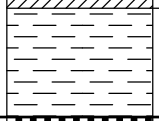
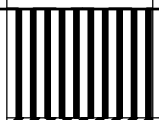
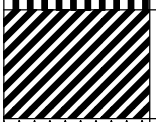
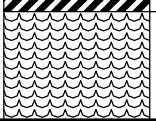
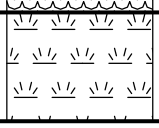
S-Shear Failure
P-Penetrometer

Qu-Unconfined Compressive Strength (tsf)
W-Water Content, percent dry weight
NP-Non-Plastic

Unit wt. (pcf) noted in italics above w%

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

COARSE-GRAINED SOILS

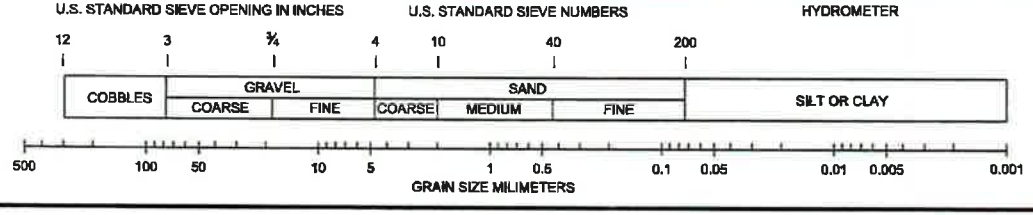
VISUAL-MANUAL DESCRIPTIONS

GEI Consultants

TYPICAL SOIL COLORS

- YELLOW
- OLIVE
- LIGHT BROWN
- BROWN
- REDDISH BROWN
- RED
- GRAY
- BLACK

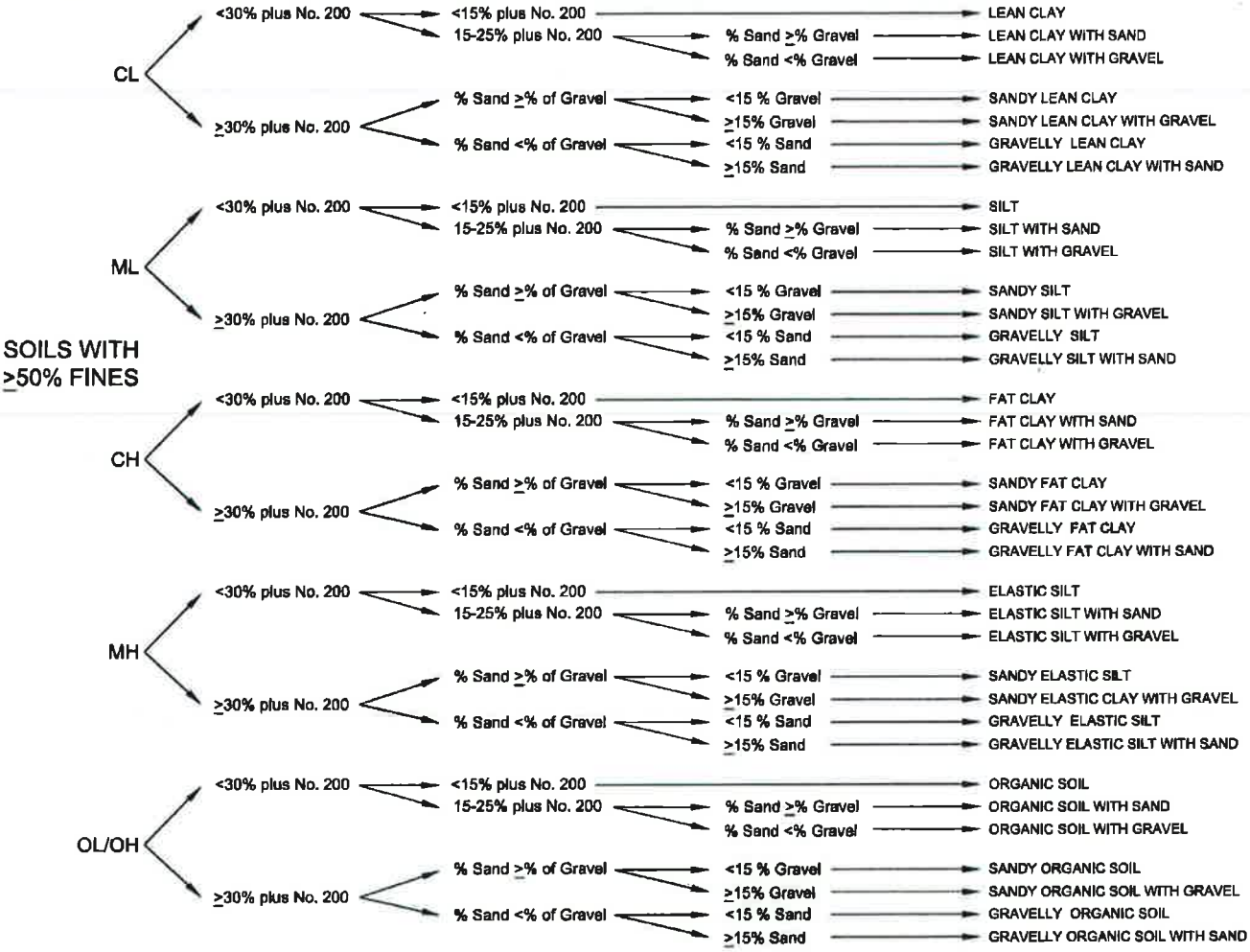
				GROUP SYMBOL	GROUP NAME
GRAVEL % Gravel > % Sand	≤5% Fines	WIDELY GRADED		GW	<15% Sand → WIDELY GRADED GRAVEL ≥15% Sand → WIDELY GRADED GRAVEL WITH SAND
		NARROWLY GRADED		GP	<15% Sand → NARROWLY GRADED GRAVEL ≥15% Sand → NARROWLY GRADED GRAVEL WITH SAND
	~10% Fines	WIDELY GRADED	Fines = ML or MH	GW-GM	<15% Sand → WIDELY GRADED GRAVEL WITH SILT ≥15% Sand → WIDELY GRADED GRAVEL WITH SILT AND SAND
			Fines = CL or CH	GW-GC	<15% Sand → WIDELY GRADED GRAVEL WITH CLAY ≥15% Sand → WIDELY GRADED GRAVEL WITH CLAY AND SAND
		NARROWLY GRADED	Fines = ML or MH	GP-GM	<15% Sand → NARROWLY GRADED GRAVEL WITH SILT ≥15% Sand → NARROWLY GRADED GRAVEL WITH SILT AND SAND
			Fines = CL or CH	GP-GC	<15% Sand → NARROWLY GRADED GRAVEL WITH CLAY ≥15% Sand → NARROWLY GRADED GRAVEL WITH CLAY AND SAND
	≥15% Fines		Fines = ML or MH	GM	<15% Sand → SILTY GRAVEL ≥15% Sand → SILTY GRAVEL WITH SAND
			Fines = CL or CH	GC	<15% Sand → CLAYEY GRAVEL ≥15% Sand → CLAYEY GRAVEL WITH SAND
SOILS WITH <50% FINES					
SAND % Sand ≥ % Gravel	≤5% Fines	WIDELY GRADED		SW	<15% Gravel → WIDELY GRADED SAND ≥15% Gravel → WIDELY GRADED SAND WITH GRAVEL
		NARROWLY GRADED		SP	<15% Gravel → NARROWLY GRADED SAND ≥15% Gravel → NARROWLY GRADED SAND WITH GRAVEL
	~10% Fines	WIDELY GRADED	Fines = ML or MH	SW-SM	<15% Gravel → WIDELY GRADED SAND WITH SILT ≥15% Gravel → WIDELY GRADED SAND WITH SILT AND GRAVEL
			Fines = CL or CH	SW-SC	<15% Gravel → WIDELY GRADED SAND WITH CLAY ≥15% Gravel → WIDELY GRADED SAND WITH CLAY AND GRAVEL
		NARROWLY GRADED	Fines = ML or MH	SP-SM	<15% Gravel → NARROWLY GRADED SAND WITH SILT ≥15% Gravel → NARROWLY GRADED SAND WITH SILT AND GRAVEL
			Fines = CL or CH	SP-SC	<15% Gravel → NARROWLY GRADED SAND WITH CLAY ≥15% Gravel → NARROWLY GRADED SAND WITH CLAY AND GRAVEL
	≥15% Fines		Fines = ML or MH	SM	<15% Gravel → SILTY SAND ≥15% Gravel → SILTY SAND WITH GRAVEL
			Fines = CL or CH	SC	<15% Gravel → CLAYEY SAND ≥15% Gravel → CLAYEY SAND WITH GRAVEL



1. GROUP NAME and (SYMBOL)
2. Structure , if any. (stratified layer thicknesses, lenses, varves, gradational changes)
3. Describe sand, gravel and fines components, with percentages, in order of predominance. Include max gravel size. For test pits give percent cobbles and boulders, by volume, and include max size.
4. Color
5. Sheen, odor, roots, ash, brick, cementation, reaction with HCL, etc.
6. "Fill," local name or geologic name, if known

GEI Consultants

FINE-GRAINED SOILS
VISUAL-MANUAL DESCRIPTIONS



ID OF INORGANIC FINE SOILS FROM MANUAL TESTS

Symbol	Name	Dry Strength	Dilatancy	Toughness*
ML	Silt	None to low	Slow to rapid	Low or thread cannot be formed
CL	Lean Clay	Medium to high	None to slow	Medium
MH	Elastic Silt	Low to medium	None to slow	Low to medium
CH	Fat Clay	High to very high	None	High

1. GROUP NAME and (SYMBOL)
2. Describe fines, sand, and gravel components, in order of predominance. Include plasticity of fines. Include percentages of sand and gravel.
3. Color
4. Sheen, odor, roots, ash, brick, cementation, torvane and penetrometer results, etc.
5. "Fill," local name or geologic name, if known

PEAT

Peat refers to a sample composed primarily of vegetable matter in varying stages of decomposition. The description should begin: PEAT (PT) and need not include percentages of sand, gravel or fines.

CRITERIA FOR DESCRIBING PLASTICITY

Description	Criteria
Nonplastic ML	A 1/8-in. (3 -mm) thread cannot be rolled at any water content
Low Plasticity ML, MH	The thread can barely be rolled and the lump cannot be formed when drier than the plastic limit *
Medium Plasticity MH, CL	The thread is easy to roll and not much time is required to reach the plastic limit. The thread cannot be rerolled after reaching the plastic limit. The lump crumbles when drier than the plastic limit
High Plasticity CH	It takes considerable time rolling and kneading to reach the plastic limit. The thread can be rerolled several times after reaching the plastic limit. The lump can be formed without crumbling when drier than the plastic limit

* Toughness refers to the strength of the thread near plastic limit. The lump refers to a lump of soil drier than the plastic, similar to dry strength.

GENERAL NOTES

Drilling and Sampling Symbols:

SS: Split-Spoon, 1 3/8-inch ID, 2-inch OD Unless otherwise noted
ST: Shelby Tube
PA: Power Auger
DB: Diamond Bit
AS: Auger Sample
JS: Jar Sample
VS: Vane Shear
WOH: Weight of Hammer
OS: Osterburg Sampler
HSA: Hollow Stem Auger
WS: Wash Sample
FT: Fish Tail
RB: Rock Bit
BS: Bulk Sample
PMT: Pressuremeter Test
GS: Giddings Sampler

Standard Penetration Test (STP) Value: Blows per foot of a 140-pound hammer falling 30 inches on a 2-inch OD split-spoon sampler, except where otherwise noted.

Water Level Measurement Symbols:

WL: Water Level
WS: While Sampling
WD: While Drilling
AB: After Boring
WCI: Wet Cave-in
DCI: Dry Cave-in
BCI: Before Casing Installation
BCR: Before Casing Removal
ACR: After Casing Removal

Water levels indicated on the boring logs are the levels measured in the boring at the time indicated. In permeable soils, the indicated elevations can be considered a reliable groundwater level. In impervious soils, the accurate determination of groundwater elevations may not be possible, even after several days of observations. In these cases, groundwater monitoring wells may need to be constructed and monitored for an extended period of time to determine the actual groundwater level.

Gradation Description and Terminology:

Coarse-grained or granular soils are defined as having more than 50% of their dry weight retained on the No. 200 sieve. Coarse grained soils include boulders, cobbles, gravel, and/or sand. Fine-grained soils are defined as having less than 50% of their dry weight retained on the No. 200 sieve. Fine grained soils include clay or clayey silt (cohesive), and silt (non-cohesive). In addition to gradation, granular soils are further defined based on their relative in-place density. Fine-grained soils are further defined based of their strength or consistency and plasticity. Additional information is provided below.

Major Component of Sample	Size Range	Other Components Present in Sample	Dry Weight, %
Boulders	Over 8 inches (200 mm)	Trace	1 to 5
Cobbles	8 inches to 3 inches (200 mm to 75 mm)	Trace to Some	5 to 12
Gravel	3 inches to No. 4 sieve	Some	12 to 34
Sand	Nos. 4 to 200 sieves (4.76 mm to 0.074 mm)	And	34 to 50
Silt	Passing No. 200 sieve (0.074 mm to 0.005 mm)		
Clay	Smaller than 0.005 mm		

Consistency of Cohesive Soils		Relative Density of Granular Soils	
Unconfined Compressive Strength, Qu, tsf	Consistency	N, blows per foot	Relative Density
<0.25	Very Soft	0 to 3	Very Loose
0.25 to 0.49	Soft	4 to 9	Loose
0.50 to 0.99	Medium (firm)	10 to 29	Medium Dense
1.0 to 1.99	Stiff	30 to 49	Dense
2.00 to 3.99	Very Stiff	50 – 80	Very Dense
4.00 to 8.00	Hard	>80	Extremely Dense
>8.00	Very Hard		

FIELD AND LABORATORY PROCEDURES

Field Sampling Procedures

Auger Sampling (AS)

In this procedure, soil samples are collected from cuttings off the auger flights as they are removed from the ground. Such samples provide a general indication of subsurface conditions; however, they do not provide undisturbed samples, nor do they provide samples from discrete depths.

Split-Barrel Sampling (SS) – (ASTM Standard D-1586-99)

In the split-barrel sampling procedures, a 2-inch O.D. split-barrel sampler is driven into the soil a distance of 18 inches by means of a 140-pound hammer falling 30 inches. The value of the Standard Penetration Resistance is obtained by counting the number of blows of the hammer over the final 12 inches of driving. The value provides a qualitative indication of the in-place relative density of cohesionless soils. The indication is only qualitative, however, since many factors can significantly affect the Standard Penetration Resistance Value, and direct correlation of results obtained by drill crews using different rigs, frilling procedures, and hammer-rod-spoon assemblies should not be made. A portion of the recovered sample is place in a sample jar and returned to the laboratory for further analysis and testing.

Shelby Tube Sampling Procedure (ST) - (ASTM D-1587-94)

In the Shelby tube sampling procedure, a thin-walled steel seamless tube with a sharp cutting edge is pushed hydraulically into the soil and a relatively undisturbed sample is obtained. This procedure is generally employed in cohesive soils. The tubes are identified, sealed, and carefully handled in the field to avoid excessive disturbance and are returned to the laboratory for extrusion and further analysis and testing.

Giddings Sampler (GS)

This type of sampling device consists of 5-foot sections of thin-wall tubing, which are capable of retrieving continuous columns of soil in 5-foot maximum increments. Because of a continuous slot in the sampling tubes, the sampler allows field determination of stratification boundaries and containerization of soil samples from any sampling depth within the 5-foot interval.

FIELD AND LABORATORY PROCEDURES

Subsurface Exploration Field Procedures

Hand-Auger Drilling (HA)

In this procedure, a sampling device is driven into the soil by repeated blows of a sledge hammer or a drop hammer. When the sampler is driven to the desired depth, the soil sample is retrieved. The hole is then advanced by manually turning the hand auger until the next sampling depth increment is reached. The hand auger drilling between sampling intervals also helps to clean and enlarge the borehole in preparation for obtaining the next sample.

Power Auger Drilling (PA)

In this type of drilling procedures, continuous flight augers are used to advance the boreholes. They are turned and hydraulically advanced by a truck, trainer, or track-mounted unit as site accessibility dictates. In auger drilling, casing and drilling mud are not required to maintain open boreholes.

Hollow-Stem Auger Drilling (HS)

In this drilling procedure, continuous flight augers (with open stems) are used to advance the boreholes. The open stem allows the sampling tool to be used without removing the augers from the borehole. Hollow-stem augers thus provide support to the sides of the borehole during the sampling operations.

Rotary Drilling (RD)

In employing rotary drilling methods, various cutting bits are used to advance the boreholes. In this process, surface casing and/or drilling fluids are used to maintain open boreholes.

Diamond Core Drilling (DB)

Diamond core drilling is used to sample cemented formations. In this procedure, a double tube (or triple tube) core barrel with a diamond bit cuts an annular space around a cylindrical prism of the material sampled. The sample is retrieved by a catcher just above the bit. Samples recovered by this procedure are placed in study containers in sequential order.

FIELD AND LABORATORY PROCEDURES

Laboratory Procedures

Water Content (Wc)

The water content of a soil is the ratio of the weight of water in a given soil mass to the weight of the dry soil. Water content is generally expressed as a percentage.

Hand Penetrometer (Qp)

In the hand penetrometer gtest, the unconfined compressive strength of a soil is determined to a maximum value of 4.5 tons per square foot (tsf) or 7.0 tsf, depending on the testing device utilized, by measuring the resistance of the soil sample to penetration by a small spring-calibrated cylinder. The hand penetrometer test has been carefully correlated with unconfined compressive strength tests and thereby provides a useful and a relative simple testing procedure in which soil strength can be quickly and easily estimated.

Unconfined Compression Tests (Qu)

In the unconfined compression strength test, an undisturbed prism of soil is loaded axially until failure or until 20% strain has been reached, whichever comes first.

Dry Density (γd)

The dry density is a measure of the amount of solids in a unit volume of soil. Use of this value is often made when measuring the degree of compaction of a soil.

Classification of Samples

In conjunction with the sample testing program, all soil samples are examined in our laboratory and visually classified on the basis of their texture and plasticity in general accordance with the Unified Soil Classification System. The soil descriptions on the boring logs are derived from this system, as well as the component gradation terminology, consistency of cohesive soils, and relative density of granular soils, as described on a separate sheet entitled General Notes. The estimated groups symbols, included in parentheses following the soil descriptions on the boring logs, are in general conformance with the Unified Soil Classification System (USCS).

FIELD AND LABORATORY PROCEDURES

Standard Boring Log Procedures

In the process of obtaining and testing samples and preparing this report, standard procedures are followed regarding field logs, laboratory data sheets, and samples.

Field logs are prepared during performance of the drilling and sampling operations and are intended to essentially portray field occurrences, sampling locations, and procedures.

Samples obtained in the field are frequently subjected to additional testing an re-classification in the laboratory by experienced Geotechnical Engineers; and therefore, differences between the field logs and the final logs may exist. The engineer preparing the report reviews the field logs, laboratory test data, and classifications and then, using judgement and experience in interpreting this data, may make further changes. It is common practice in the geotechnical engineering profession not to include field logs and laboratory data sheets in engineering reports, because they do not represent the engineer's final opinions as to appropriate descriptions for conditions encountered in the exploration and testing work. Results of laboratory tests are generally shown on the boring logs or are described in the text of the report, as appropriate.

Samples taken in the field, some of which are later subjected to laboratory tests, are retained in our laboratory for 60 days and then discarded, unless special disposition is requested by our client. Samples retained over a long period of time, even though in sealed jars, are subject to moisture loss, which changes the apparent strength of cohesive soil, generally increasing the strength from what was originally encountered in the field. Since they are then no longer representative of the moisture conditions initially encountered, observers of these samples need to recognize this factor.

Project: CTA Green Line Station

GEI Number:1801815

Vane Shear Tests Results

OPERATOR: STRATA (Baker)

SURFACE ELEVATION:

B-105 17.0 Feet

B-102 17.0 Feet

*VANE SIZE

2.0 = SMALL (11CM X 5CM) VANE

1.0 = MEDIUM (13CM X 6.5 CM) VANE

0.5 = LARGE (17.2CM X 8CM) VANE

Vane Con 1.0015

DATA REDUCTION: RCR CHECKED BY: AF

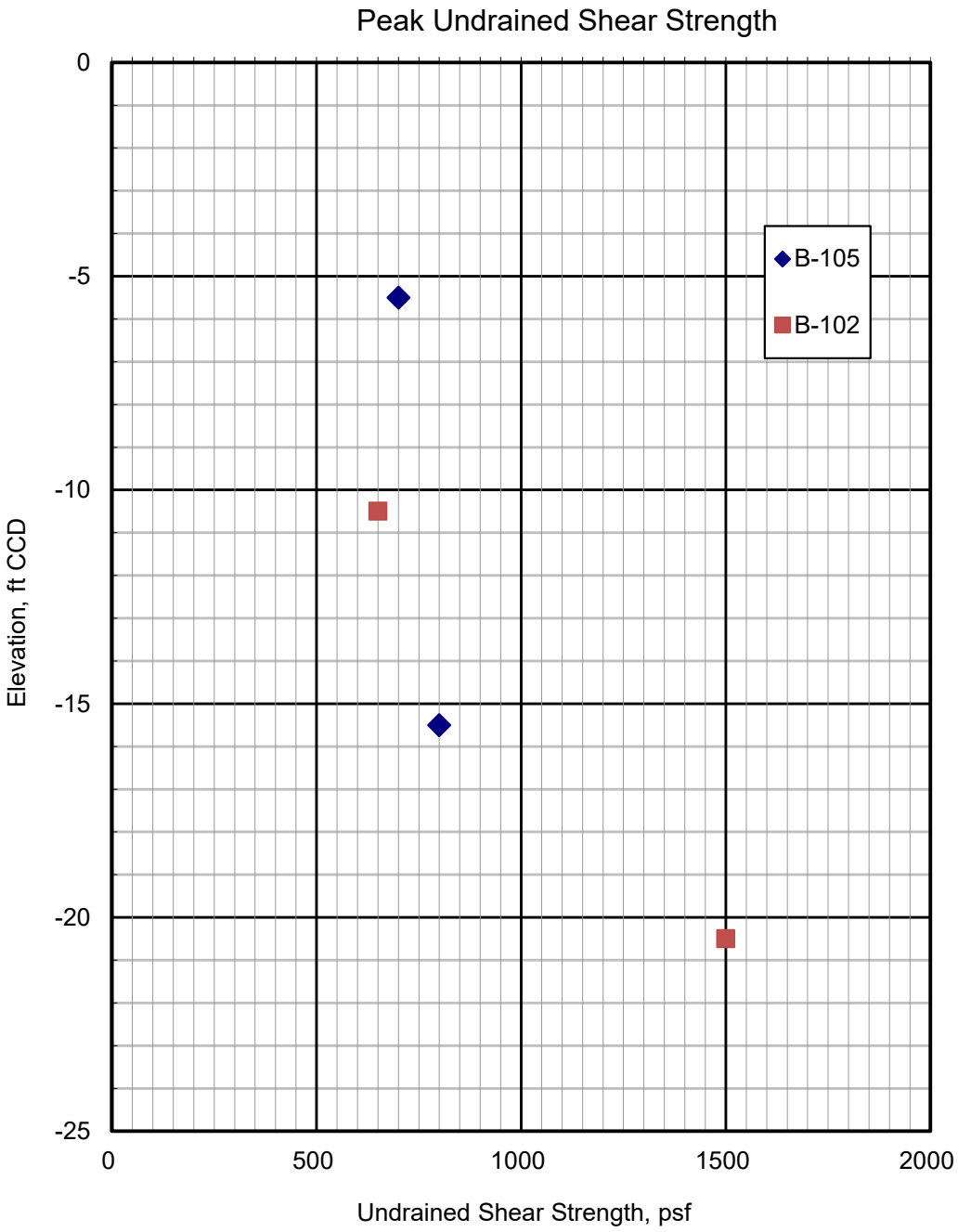
BORING NO.	VANE TIP DEPTH (ft)	VANE	a (in)	PEAK S_u (tsf)	PEAK S_u (psf)	a (in)	REMOLDED S_u (tsf)	REMOLDED S_u (psf)	SENSITIVITY PEAK/REM.	VANE TIP ELEVATION (ft CCD)
B-105	22.5	0.5	2.65	0.34	700	0.80	0.10	200	3.5	-5.5
B-105	32.5	0.5	3.10	0.40	800	1.10	0.14	275	2.9	-15.5
B-102	27.5	0.5	2.48	0.32	650	1.28	0.17	325	2.0	-10.5
B-102	37.5	1.0	2.89	0.75	1500	1.57	0.41	825	1.8	-20.5

Project: CTA Green Line Station

GEI Number:1801815

Vane Shear Tests Results

GEI Consultants



GEI Consultants
Consulting Engineers & Scientists

Project Name: Damen Green Line
GEI Project Number: 1801815
Operator: CD
Engineer: RCR
Date: June 5, 2018

PRESSUREMETER TEST RESULTS

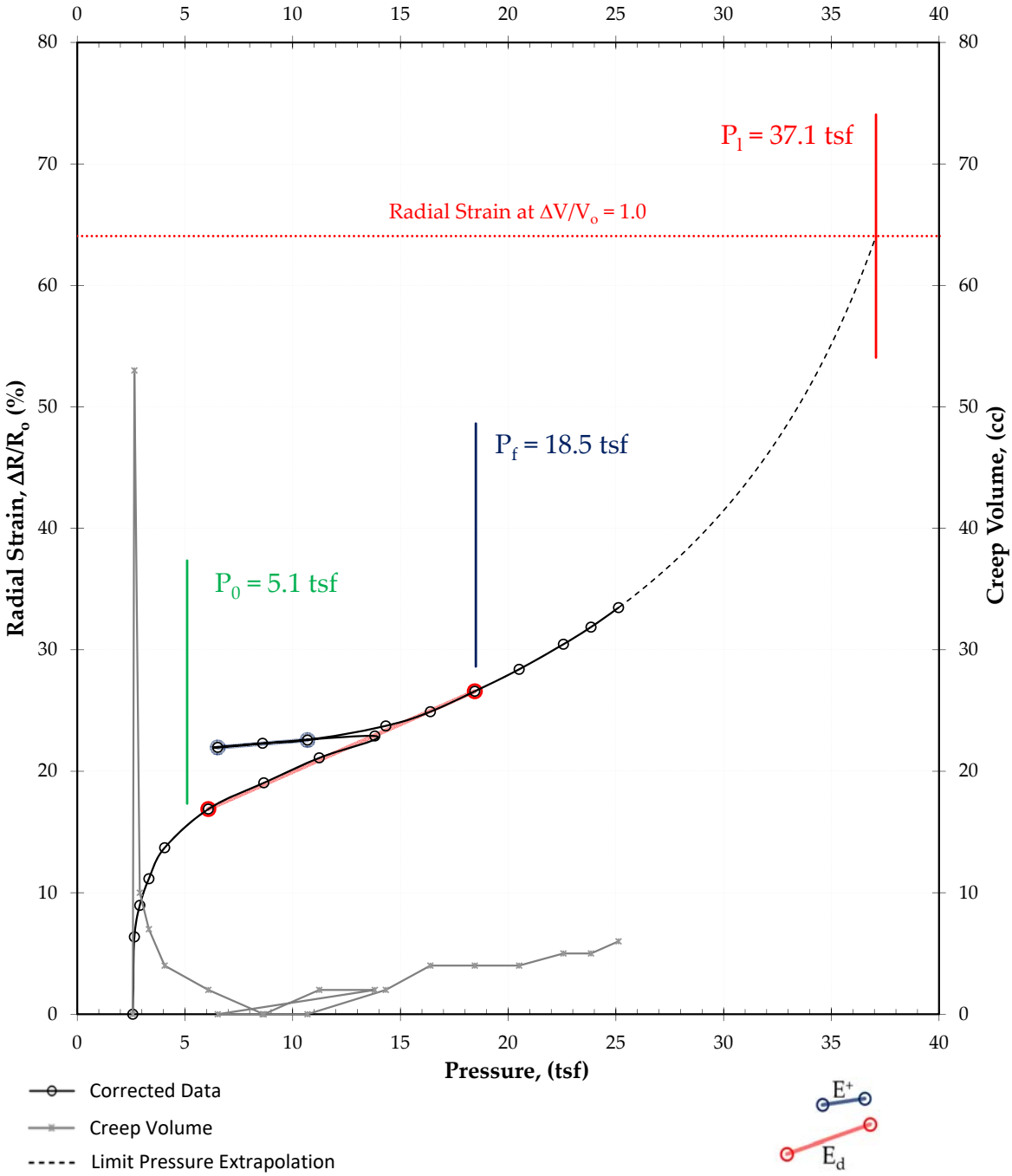
BORING ID	GROUND SURFACE (ft)	TEST DEPTH (ft)	TEST ELEVATION (ft)	Test Midpoint Elevation (ft)	P_o (tsf)	P_f (tsf)	P_l (tsf)	$P_{l(net)}$ (tsf)	E_d (tsf)	E^+ (tsf)	E_d/E^+	$E_d/P_{l\,(net)}$	P_L/P_f	USCS	Moisture (%)	SPT Results
B-102	17	68.5 to 71.0	-51.5 to -54.0	-52.8	5.1	18.5	37.1	32.0	207	1118	0.18	6.5	2.0	CL	15	58
		77.5 to 80.0	-60.5 to -63.0	-61.8	4.8	30.9	NA	-	599	1915	0.31	-	-	CL	11	50/5"
		83.5 to 86.0	-66.5 to -69.0	-67.8	5.0	23.2	NA	-	581	1825	0.32	-	-	CL	11	82/11"
B-105	17	73.5 to 76.0	-56.5 to -59.0	-57.8	5.6	25.4	47.4	41.8	318	1137	0.28	7.6	1.9	CL	11	80/11"
		83.5 to 86.0	-66.5 to -69.0	-67.8	5.7	33.6	73.8	68.1	490	1650	0.30	7.2	2.2	CL	10	81/11"
		88.5 to 91.0	-71.5 to -74.0	-72.8	6.6	17.0	40.5	33.9	284	1285	0.22	8.4	2.4	CL	16	43

	E_d/E^+	$E_d/P_{l(net)}$	P_l/P_f
AVERAGE:	0.27	7.4	2.1

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line		Boring No.:	B-102	
GEI Job #:	1801815		Test Depth (ft):	68.5	to 71.0
Test Date:	June 4, 2018				



Test Results

P_o (tsf)	P_f (tsf)	P_l (tsf)	$P_{l(net)}$ (tsf)	E_d (tsf)	E^+ (tsf)	E_d/E^+	$E_d/P_{l\,(net)}$	P_l/P_f
5.1	18.5	37.1	32.0	207	1118	0.18	6.5	2.0

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line	Probe Diameter:	BX (58 mm)
GEI Job Number:	1801815	Probe Deflated Vol.:	535 cc
Test Date:	Monday, June 4, 2018	Volumetric Zero Correction:	55 cc
Boring No.:	B-102	Assumed Poisson's Ratio, ν:	0.33
Test Depth (ft):	68.5 to 71.0	Instrument Height (ft):	3
Operator:	CD		

No.	Field Pressure Readings (bars)	Field 30 Sec. Volume (cc)	Field 60 Sec. Volume (cc)	Creep Volume (cc)	Membrane Resistance (bars)	Corrected Pressure (tsf)	Corrected 30 Sec. Volume (cc)	Corrected 60 Sec. Volume (cc)	60 Sec. Radial Strain $\Delta R/R_o$ (%)
1	0.3	55	55	0	0.00	2.6	0.0	0.0	0.00
2	0.5	74	127	53	0.18	2.7	17.3	70.3	6.37
3	0.8	147	157	10	0.24	2.9	90.2	100.2	8.96
4	1.3	176	183	7	0.28	3.3	119.0	126.0	11.15
5	2.0	210	214	4	0.33	4.1	152.7	156.7	13.70
6	4.0	252	254	2	0.39	6.1	194.0	196.0	16.89
7	6.5	282	282	0	0.43	8.7	223.2	223.2	19.05
8	9.0	307	309	2	0.46	11.2	247.6	249.6	21.10
9	11.5	331	333	2	0.49	13.8	271.1	273.1	22.90
10	4.5	319	319	0	0.47	6.5	260.8	260.8	21.97
11	6.5	324	324	0	0.48	8.6	265.3	265.3	22.30
12	8.5	328	328	0	0.48	10.7	268.8	268.8	22.57
13	12.0	342	344	2	0.50	14.3	282.0	284.0	23.73
14	14.0	356	360	4	0.52	16.4	295.7	299.7	24.90
15	16.0	379	383	4	0.55	18.5	318.3	322.3	26.59
16	18.0	404	408	4	0.58	20.5	342.9	346.9	28.39
17	20.0	432	437	5	0.61	22.6	370.5	375.5	30.46
18	21.3	452	457	5	0.63	23.8	390.3	395.3	31.87
19	22.5	474	480	6	0.66	25.1	412.1	418.1	33.47
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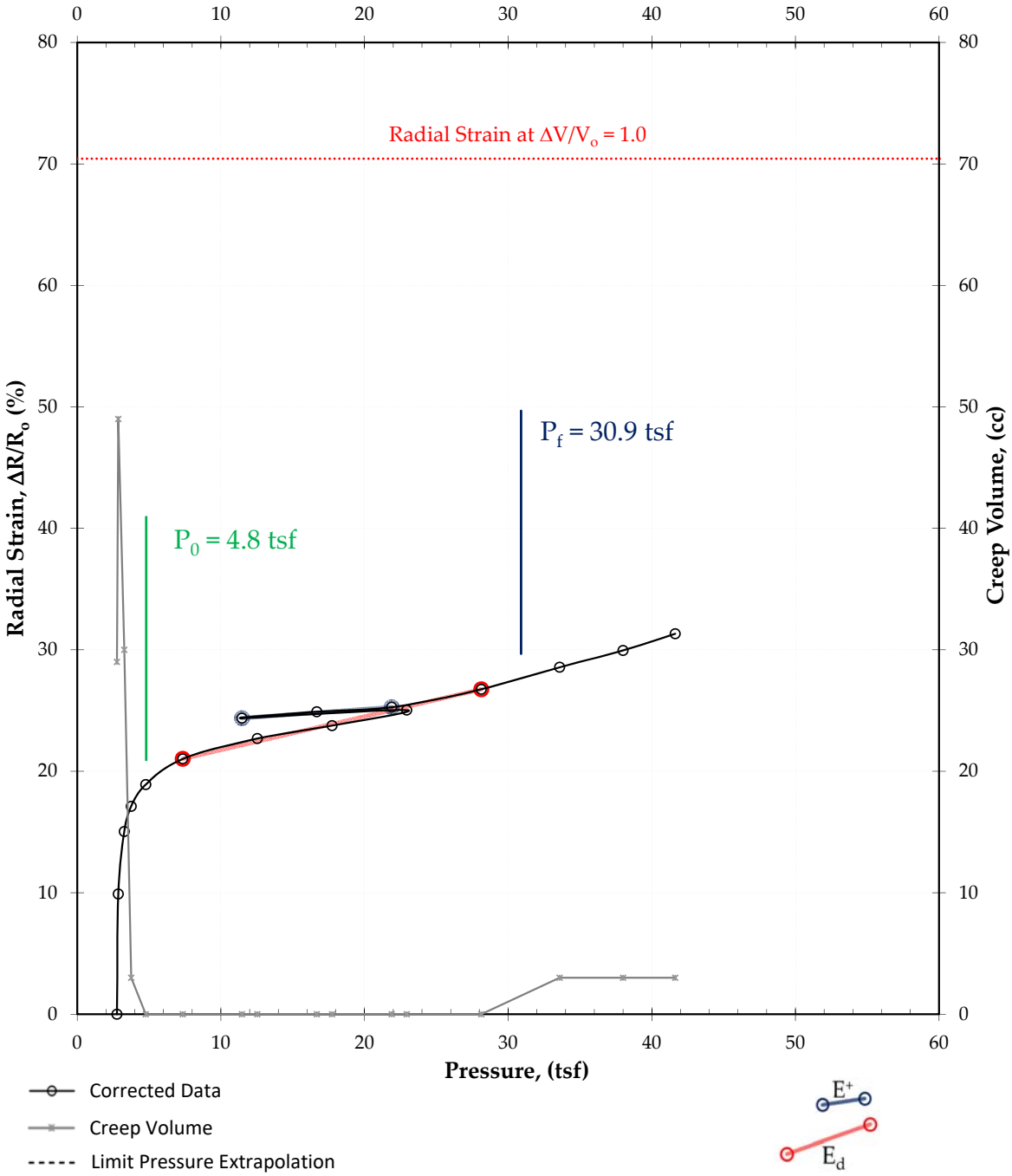
Test Zone Preparation Method: 2-5/8 In. Rock Bit

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line		Boring No.:	B-102	
GEI Job #:	1801815		Test Depth (ft):	77.5 to	80.0
Test Date:	June 4, 2018				



Test Results

P_o (tsf)	P_f (tsf)	P_l (tsf)	$P_{l(net)}$ (tsf)	E_d (tsf)	E^+ (tsf)	E_d/E^+	$E_d/P_{l\,(net)}$	P_l/P_f
4.8	30.9	NA	-	599	1915	0.31	-	-

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line	Probe Diameter:	BX (58 mm)
GEI Job Number:	1801815	Probe Deflated Vol.:	535 cc
Test Date:	Monday, June 4, 2018	Volumetric Zero Correction:	55 cc
Boring No.:	B-102	Assumed Poisson's Ratio, ν:	0.33
Test Depth (ft):	77.5 to 80.0	Instrument Height (ft):	3
Operator:	CD		

No.	Field Pressure Readings (bars)	Field 30 Sec. Volume (cc)	Field 60 Sec. Volume (cc)	Creep Volume (cc)	Membrane Resistance (bars)	Corrected Pressure (tsf)	Corrected 30 Sec. Volume (cc)	Corrected 60 Sec. Volume (cc)	60 Sec. Radial Strain $\Delta R/R_o$ (%)
1	0.3	62	91	29	0.10	2.8	0.0	0.0	0.00
2	0.5	119	168	49	0.26	2.9	62.2	111.2	9.90
3	1.0	200	230	30	0.36	3.3	143.0	173.0	15.04
4	1.5	253	256	3	0.39	3.8	195.8	198.8	17.12
5	2.5	279	279	0	0.42	4.8	221.4	221.4	18.91
6	5.0	307	307	0	0.46	7.3	248.6	248.6	21.02
7	10.0	330	330	0	0.49	12.5	270.4	270.4	22.69
8	15.0	345	345	0	0.50	17.7	284.4	284.4	23.76
9	20.0	363	363	0	0.53	22.9	301.5	301.5	25.04
10	9.0	352	352	0	0.51	11.5	292.6	292.6	24.37
11	14.0	360	360	0	0.52	16.7	299.6	299.6	24.90
12	19.0	366	366	0	0.53	21.9	304.7	304.7	25.28
13	25.0	387	387	0	0.55	28.1	324.5	324.5	26.75
14	30.3	410	413	3	0.58	33.6	346.3	349.3	28.57
15	34.5	430	433	3	0.61	38.0	365.4	368.4	29.95
16	38.0	450	453	3	0.63	41.6	384.6	387.6	31.32
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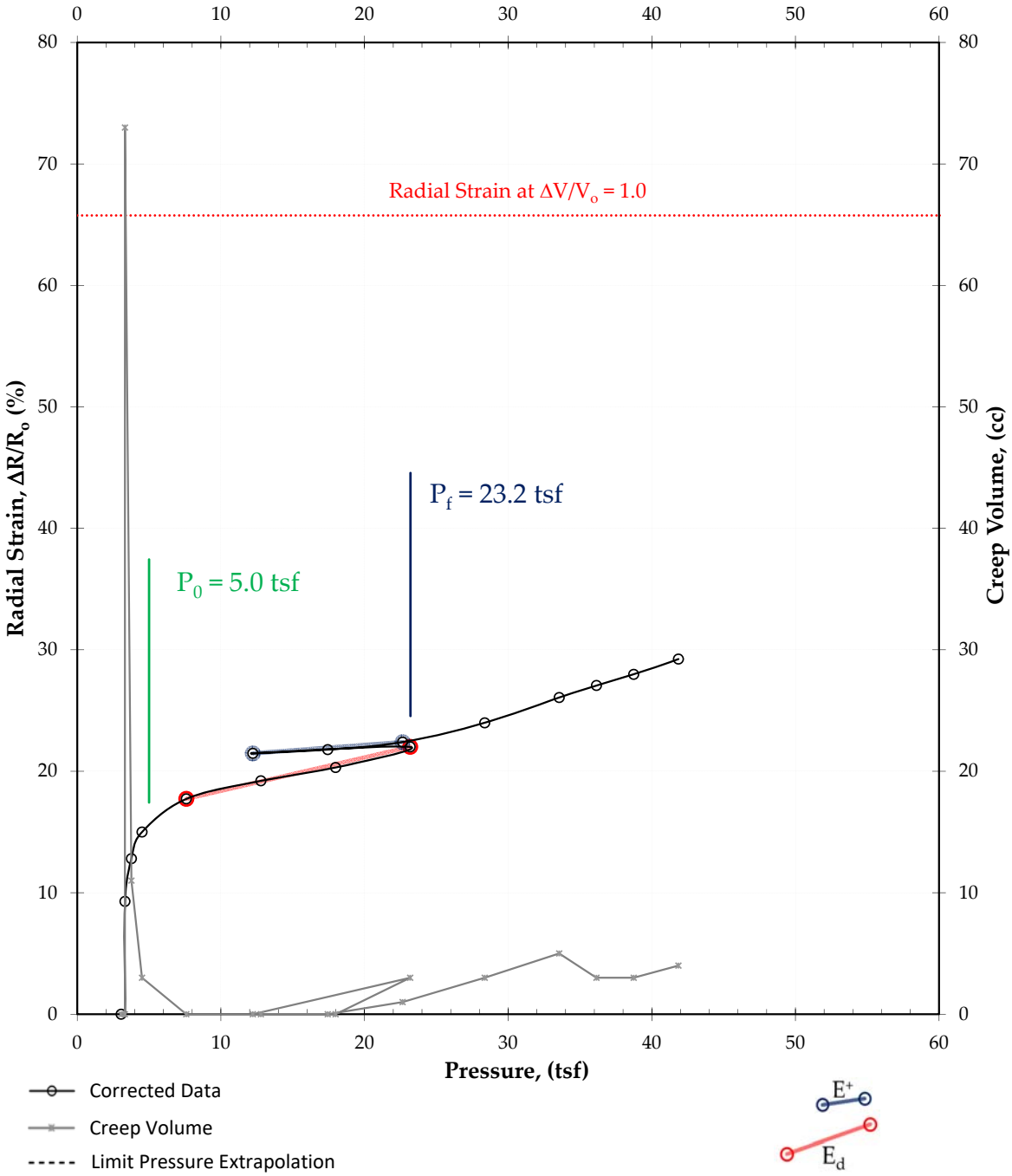
Test Zone Preparation Method: 2-5/8 In. Rock Bit

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line		Boring No.:	B-102	
GEI Job #:	1801815		Test Depth (ft):	83.5 to	86.0
Test Date:	June 4, 2018				



Test Results

P_o (tsf)	P_f (tsf)	P_l (tsf)	$P_{l(net)}$ (tsf)	E_d (tsf)	E^+ (tsf)	E_d/E^+	$E_d/P_{l\,(net)}$	P_l/P_f
5.0	23.2	NA	-	581	1825	0.32	-	-

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line	Probe Diameter:	BX (58 mm)
GEI Job Number:	1801815	Probe Deflated Vol.:	535 cc
Test Date:	Monday, June 4, 2018	Volumetric Zero Correction:	55 cc
Boring No.:	B-102	Assumed Poisson's Ratio, ν:	0.33
Test Depth (ft):	83.5 to 86.0	Instrument Height (ft):	3
Operator:	CD		

No.	Field Pressure Readings (bars)	Field 30 Sec. Volume (cc)	Field 60 Sec. Volume (cc)	Creep Volume (cc)	Membrane Resistance (bars)	Corrected Pressure (tsf)	Corrected 30 Sec. Volume (cc)	Corrected 60 Sec. Volume (cc)	60 Sec. Radial Strain $\Delta R/R_o$ (%)
1	0.3	55	55	0	0.00	3.1	0.0	0.0	0.00
2	0.5	55	55	0	0.00	3.3	-2.0	-2.0	-0.19
3	0.8	88	161	73	0.24	3.3	31.0	104.0	9.29
4	1.3	192	203	11	0.32	3.8	134.8	145.8	12.81
5	2.0	227	230	3	0.36	4.5	169.5	172.5	15.00
6	5.0	265	265	0	0.41	7.6	206.5	206.5	17.73
7	10.0	285	285	0	0.43	12.8	225.3	225.3	19.21
8	15.0	300	300	0	0.45	18.0	239.4	239.4	20.31
9	20.0	320	323	3	0.48	23.2	258.4	261.4	22.01
10	9.5	314	314	0	0.47	12.2	254.4	254.4	21.47
11	14.5	319	319	0	0.47	17.4	258.5	258.5	21.78
12	19.5	327	328	1	0.48	22.7	265.5	266.5	22.40
13	25.0	347	350	3	0.51	28.4	284.4	287.4	23.99
14	30.0	374	379	5	0.54	33.6	310.3	315.3	26.07
15	32.5	390	393	3	0.56	36.1	325.8	328.8	27.06
16	35.0	403	406	3	0.58	38.7	338.2	341.2	27.98
17	38.0	420	424	4	0.60	41.9	354.6	358.6	29.24
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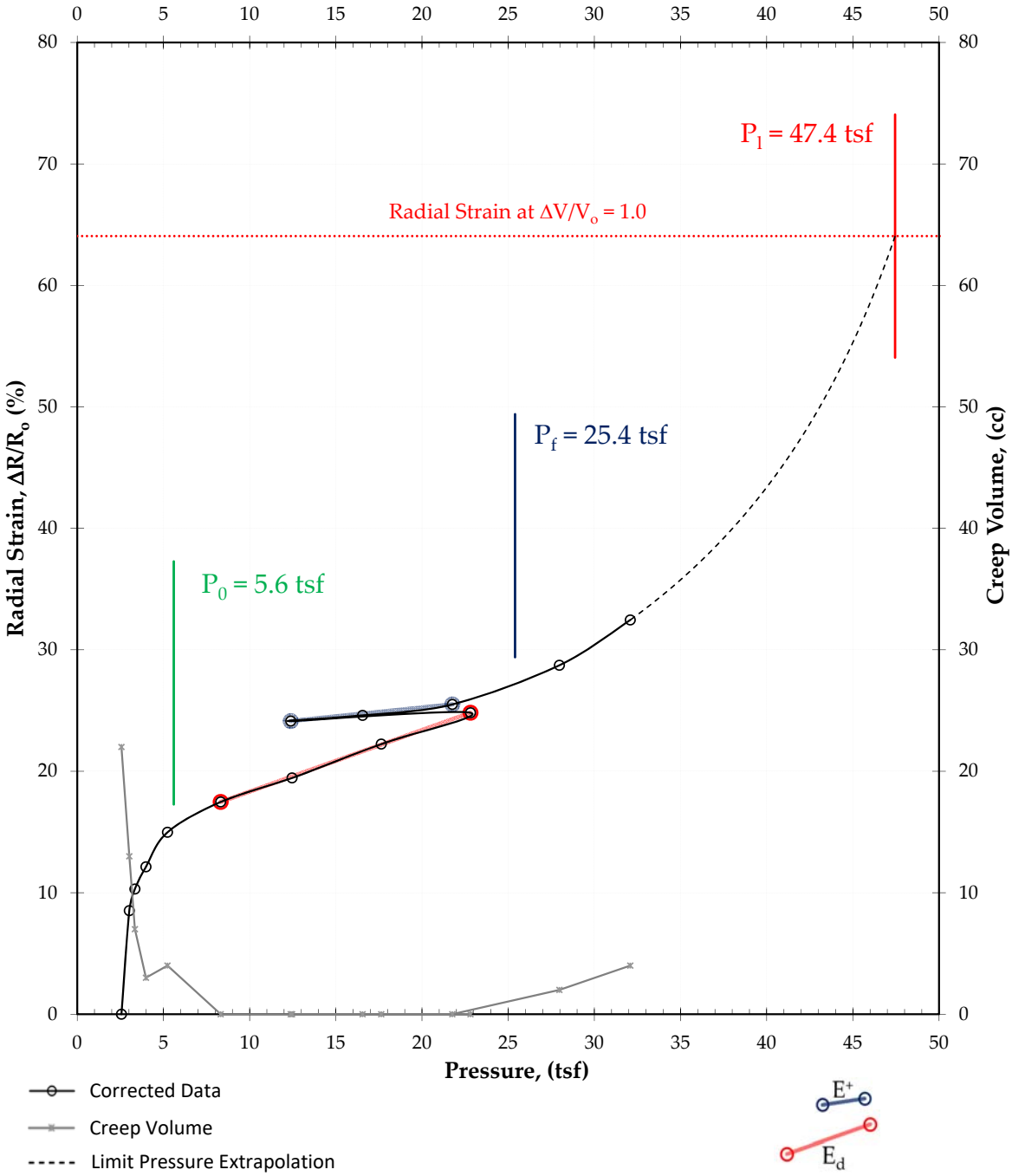
Test Zone Preparation Method: 2-5/8 In. Rock Bit

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line		Boring No.:	B-105	
GEI Job #:	1801815		Test Depth (ft):	73.5 to	76.0
Test Date:	June 1, 2018				



Test Results

P_o (tsf)	P_f (tsf)	P_l (tsf)	$P_{l(net)}$ (tsf)	E_d (tsf)	E^+ (tsf)	E_d/E^+	$E_d/P_{l\,(net)}$	P_l/P_f
5.6	25.4	47.4	41.8	318	1137	0.28	7.6	1.9

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line	Probe Diameter:	BX (58 mm)
GEI Job Number:	1801815	Probe Deflated Vol.:	535 cc
Test Date:	Friday, June 1, 2018	Volumetric Zero Correction:	5 cc
Boring No.:	B-105	Assumed Poisson's Ratio, ν:	0.33
Test Depth (ft):	73.5 to 76.0	Instrument Height (ft):	3
Operator:	CD		

No.	Field Pressure Readings (bars)	Field 30 Sec. Volume (cc)	Field 60 Sec. Volume (cc)	Creep Volume (cc)	Membrane Resistance (bars)	Corrected Pressure (tsf)	Corrected 30 Sec. Volume (cc)	Corrected 60 Sec. Volume (cc)	60 Sec. Radial Strain $\Delta R/R_o$ (%)
1	0.3	49	71	22	0.17	2.6	0.0	0.0	0.00
2	0.8	89	102	13	0.23	3.0	82.1	95.1	8.53
3	1.1	116	123	7	0.27	3.3	109.0	116.0	10.31
4	1.8	142	145	3	0.30	4.0	134.7	137.7	12.13
5	3.0	176	180	4	0.36	5.2	168.3	172.3	14.98
6	6.0	212	212	0	0.40	8.3	203.3	203.3	17.48
7	10.0	238	238	0	0.44	12.5	228.4	228.4	19.45
8	15.0	275	275	0	0.48	17.6	264.4	264.4	22.24
9	20.0	310	310	0	0.52	22.8	298.5	298.5	24.82
10	10.0	299	299	0	0.51	12.4	289.4	289.4	24.13
11	14.0	306	306	0	0.52	16.6	295.6	295.6	24.60
12	19.0	319	319	0	0.53	21.8	307.7	307.7	25.50
13	25.0	362	364	2	0.58	28.0	349.5	351.5	28.72
14	29.0	413	417	4	0.64	32.1	399.7	403.7	32.46
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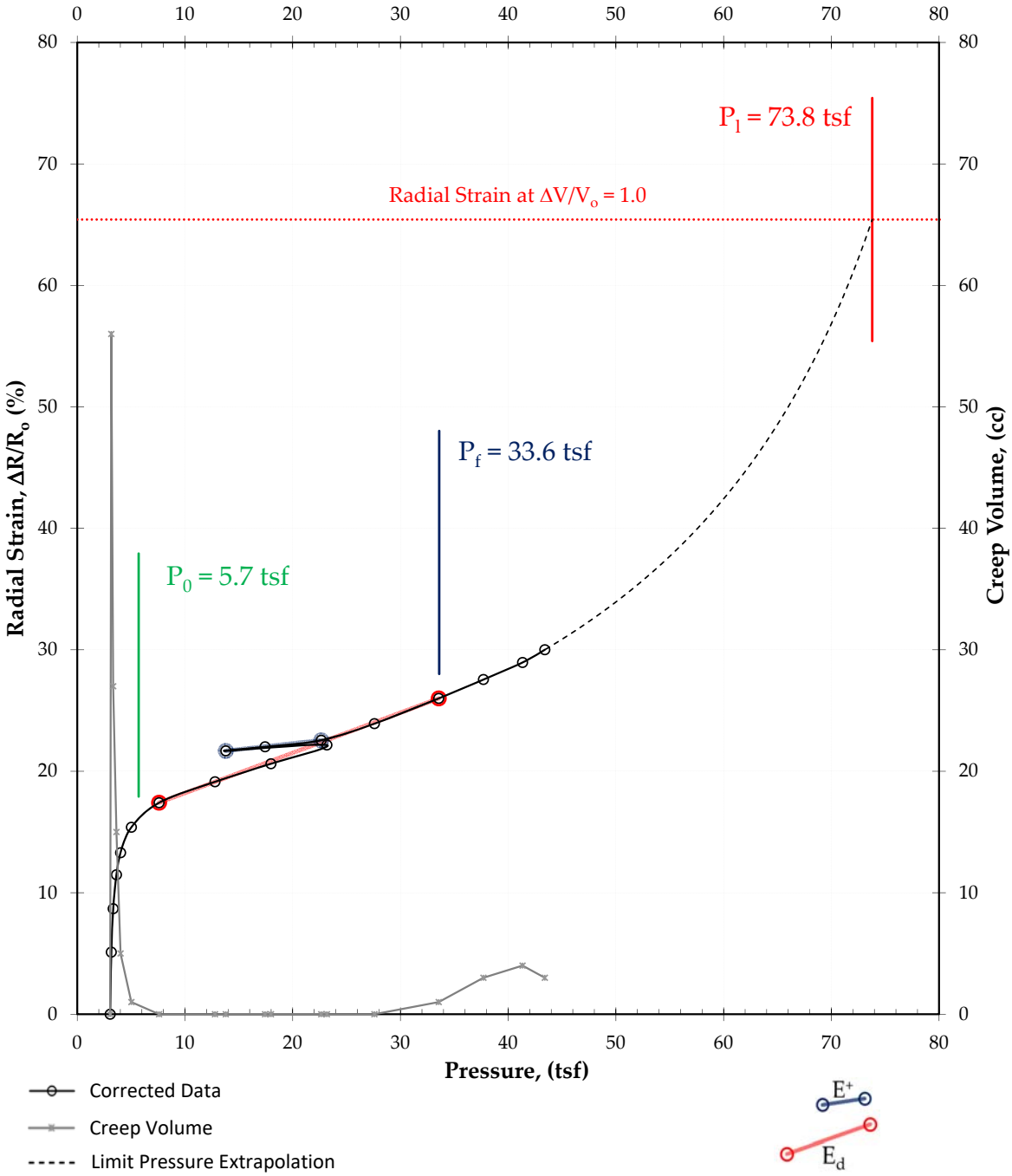
Test Zone Preparation Method: 2-5/8 In. Rock Bit

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line		Boring No.:	B-105	
GEI Job #:	1801815		Test Depth (ft):	83.5	to 86.0
Test Date:	June 1, 2018				



Test Results

P_o (tsf)	P_f (tsf)	P_l (tsf)	$P_{l(net)}$ (tsf)	E_d (tsf)	E^+ (tsf)	E_d/E^+	$E_d/P_{l\,(net)}$	P_l/P_f
5.7	33.6	73.8	68.1	490	1650	0.30	7.2	2.2

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line	Probe Diameter:	BX (58 mm)
GEI Job Number:	1801815	Probe Deflated Vol.:	535 cc
Test Date:	Friday, June 1, 2018	Volumetric Zero Correction:	5 cc
Boring No.:	B-105	Assumed Poisson's Ratio, ν:	0.33
Test Depth (ft):	83.5 to 86.0	Instrument Height (ft):	3
Operator:	CD		

No.	Field Pressure Readings (bars)	Field 30 Sec. Volume (cc)	Field 60 Sec. Volume (cc)	Creep Volume (cc)	Membrane Resistance (bars)	Corrected Pressure (tsf)	Corrected 30 Sec. Volume (cc)	Corrected 60 Sec. Volume (cc)	60 Sec. Radial Strain $\Delta R/R_o$ (%)
1	0.3	5	5	0	0.00	3.1	0.0	0.0	0.00
2	0.5	7	63	56	0.15	3.2	0.1	56.1	5.11
3	0.8	77	104	27	0.23	3.3	70.0	97.0	8.69
4	1.1	122	137	15	0.29	3.6	114.9	129.9	11.48
5	1.5	154	159	5	0.33	4.0	146.7	151.7	13.29
6	2.5	184	185	1	0.36	5.0	176.3	177.3	15.39
7	5.0	211	211	0	0.40	7.6	202.5	202.5	17.41
8	10.0	234	234	0	0.43	12.8	224.3	224.3	19.13
9	15.0	254	254	0	0.46	18.0	243.4	243.4	20.62
10	20.0	275	275	0	0.48	23.2	263.4	263.4	22.16
11	11.0	267	267	0	0.47	13.8	257.1	257.1	21.68
12	14.5	272	272	0	0.48	17.4	261.5	261.5	22.01
13	19.5	280	280	0	0.49	22.6	268.5	268.5	22.55
14	24.3	299	299	0	0.51	27.6	286.6	286.6	23.92
15	30.0	327	328	1	0.54	33.6	313.3	314.3	26.00
16	34.0	347	350	3	0.57	37.7	332.4	335.4	27.55
17	37.5	366	370	4	0.59	41.3	350.7	354.7	28.95
18	39.5	382	385	3	0.61	43.4	366.2	369.2	30.01
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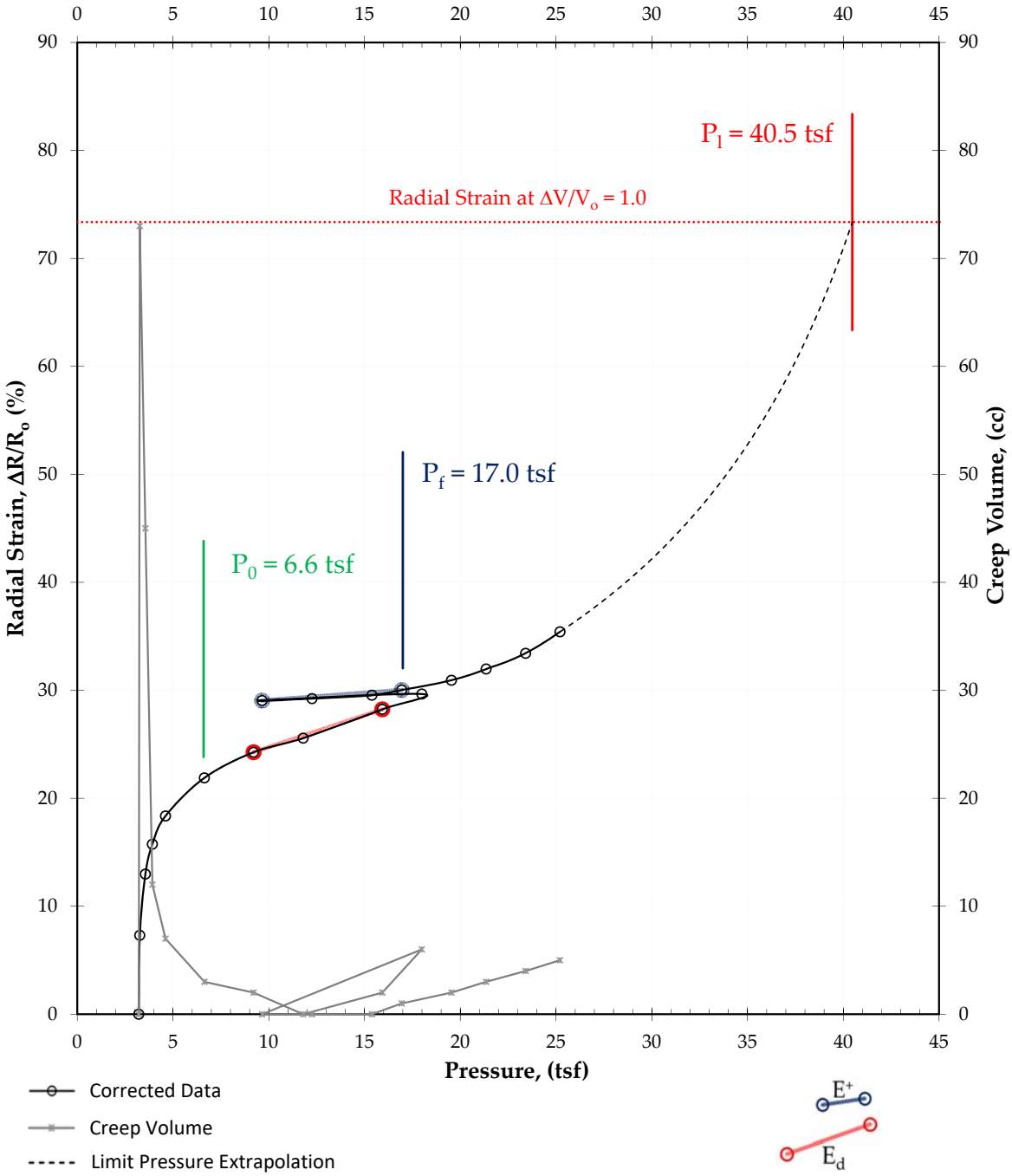
Test Zone Preparation Method: 2-5/8 In. Rock Bit

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line		Boring No.:	B-105	
GEI Job #:	1801815		Test Depth (ft):	88.5	to 91.0
Test Date:	June 1, 2018				



Test Results

P_o (tsf)	P_f (tsf)	P_l (tsf)	$P_{l(net)}$ (tsf)	E_d (tsf)	E^+ (tsf)	E_d/E^+	$E_d/P_{l\,(net)}$	P_l/P_f
6.6	17.0	40.5	33.9	284	1285	0.22	8.4	2.4

Pressuremeter Test Data

GEI Consultants
Consulting Engineers & Scientists

Project Name:	Damen Green Line	Probe Diameter:	BX (58 mm)
GEI Job Number:	1801815	Probe Deflated Vol.:	535 cc
Test Date:	Friday, June 1, 2018	Volumetric Zero Correction:	5 cc
Boring No.:	B-105	Assumed Poisson's Ratio, ν:	0.33
Test Depth (ft):	88.5 to 91.0	Instrument Height (ft):	3
Operator:	CD		

No.	Field Pressure Readings (bars)	Field 30 Sec. Volume (cc)	Field 60 Sec. Volume (cc)	Creep Volume (cc)	Membrane Resistance (bars)	Corrected Pressure (tsf)	Corrected 30 Sec. Volume (cc)	Corrected 60 Sec. Volume (cc)	60 Sec. Radial Strain $\Delta R/R_o$ (%)
1	0.3	5	5	0	0.00	3.2	0.0	0.0	0.00
2	0.5	15	88	73	0.20	3.3	8.0	81.0	7.30
3	0.9	110	155	45	0.32	3.6	102.9	147.9	12.98
4	1.3	177	189	12	0.37	3.9	169.7	181.7	15.75
5	2.0	215	222	7	0.41	4.6	207.5	214.5	18.36
6	4.0	265	268	3	0.47	6.6	256.8	259.8	21.89
7	6.5	298	300	2	0.51	9.2	289.1	291.1	24.26
8	9.0	318	318	0	0.53	11.8	308.5	308.5	25.57
9	13.0	353	355	2	0.57	15.9	342.7	344.7	28.23
10	15.0	369	375	6	0.60	18.0	358.4	364.4	29.66
11	7.0	365	365	0	0.59	9.7	356.0	356.0	29.05
12	9.5	368	368	0	0.59	12.3	358.4	358.4	29.23
13	12.5	373	373	0	0.59	15.4	362.8	362.8	29.55
14	14.0	379	380	1	0.60	16.9	368.6	369.6	30.03
15	16.5	391	393	2	0.62	19.5	380.1	382.1	30.93
16	18.3	405	408	3	0.63	21.3	393.8	396.8	31.97
17	20.3	425	429	4	0.66	23.4	413.4	417.4	33.42
18	22.0	453	458	5	0.69	25.2	441.0	446.0	35.42
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Test Zone Preparation Method: 2-5/8 In. Rock Bit

Appendix B

Belled Caissons Bearing Capacity and Settlement

Micropile Capacity

Uplift Capacity

Squeeze Analysis

Micropile Lateral Load Analysis

BEARING CAPACITY AND ESTIMATED SETTLEMENT OF A DRILLED SHAFT

Menard, L., *The Menard Pressuremeter: Interpretation and Application of Pressuremeter Test to Foundation Design*, Sols-Soils No. 26, 1975.
Briaud, J. L., *The Pressuremeter*, Texas A&M University, December, 1987.
Baker, C. N., *Use of Pressuremeter in Mixed Highrise Foundation Design,* ASCE Special Publication No. 38, 1983.

Reference:C:\Ati Files\MathCad Files\units.xmcd

Material Properties and Dimensions

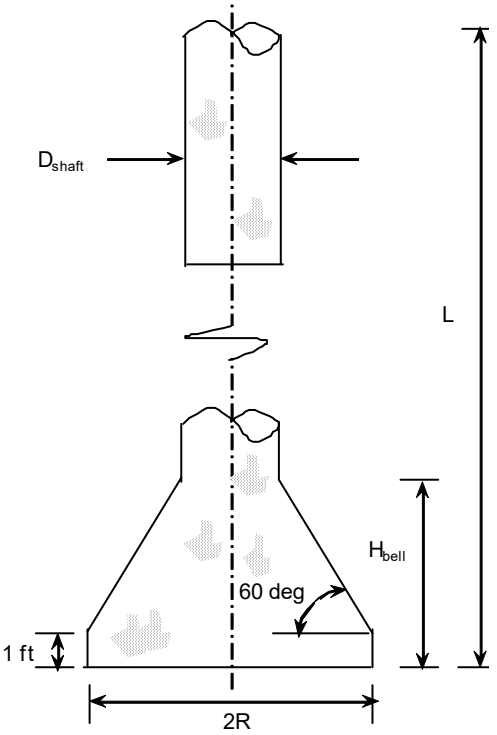
2.5-ft Diameter Belled Caisson

Design bell diameter:
$D_{bell} := 2.5ft$

Design shaft diameter:
$D_{shaft} := 2.5ft$

Design bearing radius (or 1/2 rect. width):
$R := \frac{1}{2}\cdot(D_{bell})$ $R = 1.25\cdot ft$

Height of bell:
$H_{bell} := 1ft + \left(R - \frac{D_{shaft}}{2}\right)\cdot\tan(60deg)$
$H_{bell} = 1\,ft$



Area at bearing depth:
$A := \pi\cdot R^2$ $A = 4.9\cdot ft^2$

Perimeter at bearing depth:
$P := 2\cdot\pi\cdot R$ $P = 7.9\cdot ft$

Figure 1: Caisson Geometry

Generalized Soil Properties

Average unit weight of soil: $\gamma := 125pcf$

Design groundwater elevation (CCD): $D_{gw} := 10ft$ Note: If the top of shaft is below the gw table set equal to D_{surf}

Concrete Properties

Compressive strength: $f'_c := 4000psi$

Modulus of elasticity: $E_c := 57000\cdot\sqrt{f'_c\cdot psi}$ $E_c = 3605\cdot ksi$

Determine the Allowable Bearing Capacity (Method 5 - Briaud and Baker)

The equivalent limit pressure represents the average limit pressure in the homogeneous bearing layer near the point of the pile. A homogeneous layer is defined as a layer where the maximum limit pressure is not larger than 1.5 times the minimum limit pressure. In this case

$$p_{le} := \frac{1}{2 \cdot a} \cdot \int_{-a}^{a} p_l(z)\, dz$$

Equivalent pile diameter: $B := \frac{4 \cdot A}{P}$

The value of a is taken as: $a := 1.65ft$ if $B \le 3.3ft$ or,

$a := \frac{B}{2}$ if $B > 3.3ft$

$a := if\left(B > 3.3ft, \frac{B}{2}, 1.65ft\right)$

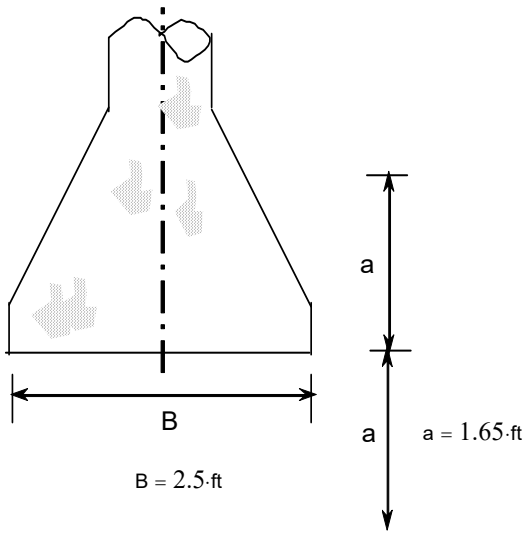


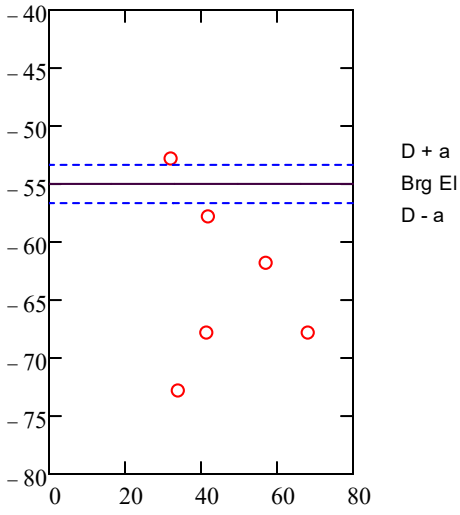
Figure 2: Influence Zone for Evaluation of Bearing Capacity

Bearing elevation: $D_1 := -55ft$

Determine the weighted average of the limit pressures between:

$D_1 + a = -53.35 \cdot ft$ and $D_1 - a = -56.65 \cdot ft$

Elevation (CCD)



$$p_{le} := \frac{32 + 41.8}{2} tsf$$

$p_{le} = 36.9 \cdot tsf$

Allowable Bearing Capacity (cont'd)

The ultimate end bearing capacity of a drilled shaft is related to the limit pressure of the soil by a linear function.

$$q_l - q_0 := k \cdot (p_{le} - p_o)$$

Where,

k	Is the bearing capacity factor (1.1 < k < 2 for long piles)
p_0	is the horizontal at-rest earth pressure at the bearing level (from PMT tests)
q_0	is the total overburden pressure at the bearing level after construction

For bored piles founded in clay and silt: $k := 1.4$

Briaud recommends a factor of safety of 3: USE $FS := 3$

Bearing Elevation: $D_1 = -55 \cdot ft$

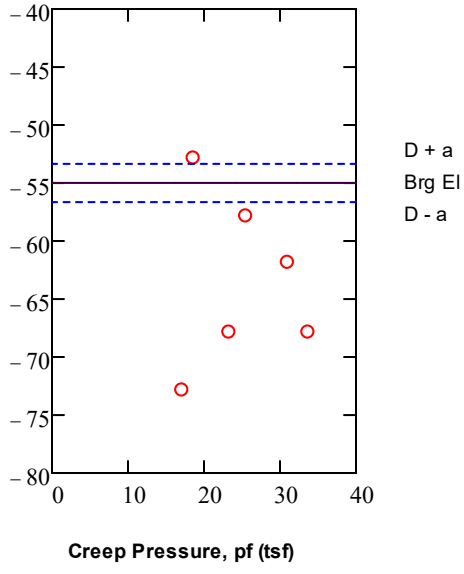
The overburden pressure: $q_0 := \gamma \cdot (D_{surf} - D_{gw}) + (\gamma - \gamma_w) \cdot (D_{gw} - D_1)$ $q_0 = 1.7 \cdot tsf$

The ultimate bearing capacity: $q_l := k \cdot (p_{le}) + q_0$ $q_l = 53.4 \cdot tsf$

The net allowable bearing capacity: $q_{all_briaud} := \frac{q_l - q_0}{FS}$ $q_{all_briaud} = 17.2 \cdot tsf$

Alternatively, Baker. recommends a factor of safety of 2.5 on k and limits the allowable bearing capacity to less than the PMT creep pressure for the sustained dead and live load plus the overburden.

Elevation (CCD)



The avg creep pressure $p_f := \frac{18.5 + 25.4}{2} \cdot tsf$ $p_f = 22 \cdot tsf$

The net allowable bearing capacity: $q_{all_baker} := \min\left[\frac{k}{2.5} \cdot (p_{le}), p_f\right]$ $q_{all_baker} = 20.7 \cdot tsf$

USE: $q_{all1} := 16 tsf$

Calculation of the Layer Moduli

The soil below the foundation level is divided into a series of elementary layers equal to 1/2 the bearing width. The average pressuremeter modulus is calculated for each layer as the harmonic mean of the PMT data.

The structure coefficient, α, is determined from the soil type and an estimation of the state of consolidation through the modulus to limit pressure ratio, E/p_l. Shape factors, introduced to accomodate non-circular sections are functions of the length to wirth ratio, L/B.

Structure coefficient (from PMT test data): $\alpha := 0.5$

Shape coefficients (for circle): $\lambda_2 := 1$ $\lambda_3 := 1$

Reference length: $R_0 := 1\,ft$

Menard's α Factors

Soil Type	Peat		Clay		Silt		Sand		Sand and Gravel	
	E/p_l*	α	E/p_l*	α	E/p_l*	α	E/p_l*	α	E/p_l*	α
Over Consolidated			>16	1	>14	2/3	>12	1/2	>10	1/3
Normally Consolidated	All	1	9–16	2/3	8-14	1/2	7-12	1/3	6-10	1/4
Weathered and/or Remolded			7-9	1/2		1/2		1/3		1/4

Rock	Extremely Fractured	Other	Slightly Fractured or Extremely Weathered
	α = 1/3	α = 1/2	α = 2/3

Determine the Equivalent Pressuremeter Moduli

Bearing elevation: $D_1 = -55\,ft$

The weighted average pressuremeter moduli of the soil (from PMT test data)

Between $D_1 = -55 \cdot ft$ and $D_1 - R = -56.25 \cdot ft$

$E_1 := 207\,tsf$ $E_1 = 207 \cdot tsf$

Between $D_1 - R = -56.25 \cdot ft$ and $D_1 - 2R = -57.5 \cdot ft$

$E_2 := 318\,tsf$ $E_2 = 318 \cdot tsf$

Between $D_1 - 2 \cdot R = -57.5 \cdot ft$ and $D_1 - 3R = -58.75 \cdot ft$

$E_3 := 318\,tsf$ $E_3 = 318 \cdot tsf$

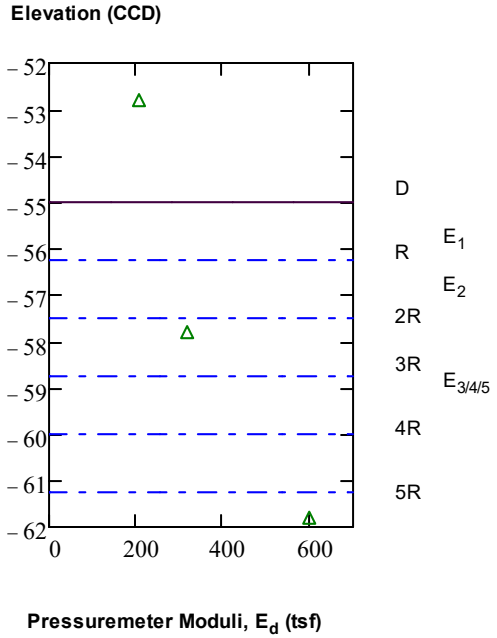
Between $D_1 - 3 \cdot R = -58.75 \cdot ft$ and $D_1 - 4R = -60 \cdot ft$

$E_4 := 318\,tsf$ $E_4 = 318 \cdot tsf$

Between $D_1 - 4 \cdot R = -60 \cdot ft$ and $D_1 - 5R = -61.25 \cdot ft$

$E_5 := 599\,tsf$ $E_5 = 599 \cdot tsf$

$$E_{3.4.5} := \frac{3}{\frac{1}{E_3} + \frac{1}{E_4} + \frac{1}{E_5}} = 377 \cdot tsf$$



Determine the equivalent moduli

Spherical: $E_{A1} := E_1$ $E_{A1} = 207 \cdot tsf$

Deviatoric: $E_{B1} := \frac{3.2}{\frac{1}{E_1} + \frac{1}{0.85 \cdot E_2} + \frac{1}{E_{3.4.5}}}$ $E_{B1} = 286 \cdot tsf$

Determine the Estimated Settlement (Menard and Elastic Theory)

Bearing elevation: $D_1 = -55 ft$

Shaft length: $L := D_{surf} - D_1$ $L = 60 ft$

Maximum (Dead + Live) est settlement at $q_{max} := q_{all1} = 16 \cdot tsf$ $P_{max} := q_{max} \cdot A$ $P_{max} = 157 \cdot kip$

Spherical: $w_3 := \frac{\alpha}{4.5 \cdot E_{A1}} \cdot q_{max} \cdot \lambda_3 \cdot R$ $w_3 = 0.129 \cdot in$

Deviatoric: $w_2 := \frac{1.33 \cdot q_{max}}{3 \cdot E_{B1}} \cdot R_0 \cdot \left(\lambda_2 \cdot \frac{R}{R_0} \right)^{\alpha}$ $w_2 = 0.333 \cdot in$

Elastic shortening of shaft: $w_1 := \frac{q_{max} \cdot L}{E_c} \cdot \left(\frac{D_{shaft}}{2 \cdot R} \right)^2$ $w_1 = 0.044 \cdot in$

Total estimated settlement: $w := w_1 + w_2 + w_3$ $w = 0.51 \cdot in$

BEARING CAPACITY AND ESTIMATED SETTLEMENT OF A DRILLED SHAFT

Menard, L., *The Menard Pressuremeter: Interpretation and Application of Pressuremeter Test to Foundation Design*, Sols-Soils No. 26, 1975.
Briaud, J. L., *The Pressuremeter*, Texas A&M University, December, 1987.
Baker, C. N., *Use of Pressuremeter in Mixed Highrise Foundation Design,* ASCE Special Publication No. 38, 1983.

Reference:C:\Ati Files\MathCad Files\units.xmcd

Material Properties and Dimensions

5-ft Diameter Belled Caisson

Design bell diameter:

$D_{bell} := 5ft$

Design shaft diameter:

$D_{shaft} := 2.5ft$

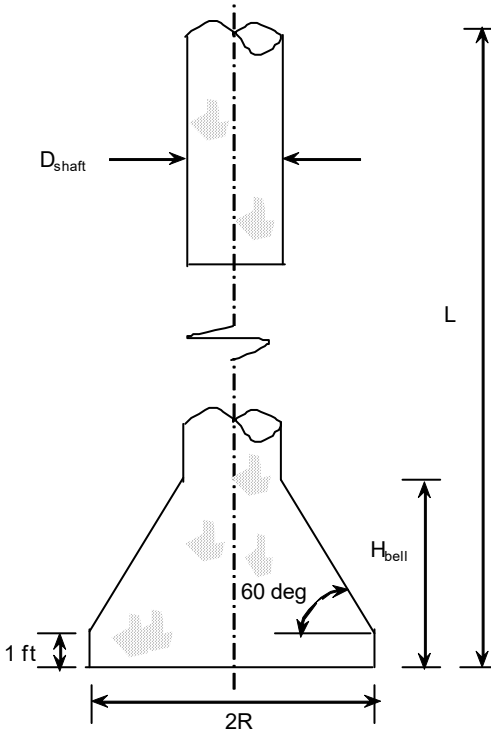
Design bearing radius (or 1/2 rect. width):

$R := \frac{1}{2}\cdot(D_{bell})$ $R = 2.5\cdot ft$

Height of bell:

$H_{bell} := 1ft + \left(R - \frac{D_{shaft}}{2}\right)\cdot\tan(60deg)$

$H_{bell} = 3.165\,ft$



Area at bearing depth:

$A := \pi\cdot R^2$ $A = 19.6\cdot ft^2$

Perimeter at bearing depth:

$P := 2\cdot\pi\cdot R$ $P = 15.7\cdot ft$

Figure 1: Caisson Geometry

Generalized Soil Properties

Average unit weight of soil: $\gamma := 125pcf$

Design groundwater elevation (CCD): $D_{gw} := 10ft$ Note: If the top of shaft is below the gw table set equal to D_{surf}

Concrete Properties

Compressive strength: $f'_c := 4000psi$

Modulus of elasticity: $E_c := 57000\cdot\sqrt{f'_c\cdot psi}$ $E_c = 3605\cdot ksi$

Determine the Allowable Bearing Capacity (Method 5 - Briaud and Baker)

The equivalent limit pressure represents the average limit pressure in the homogeneous bearing layer near the point of the pile. A homogeneous layer is defined as a layer where the maximum limit pressure is not larger than 1.5 times the minimum limit pressure. In this case

$$p_{le} := \frac{1}{2 \cdot a} \cdot \int_{-a}^{a} p_l(z)\, dz$$

Equivalent pile diameter: $B := \frac{4 \cdot A}{P}$

The value of a is taken as: $a := 1.65ft$ if $B \le 3.3ft$ or,

$a := \frac{B}{2}$ if $B > 3.3ft$

$a := if\left(B > 3.3ft, \frac{B}{2}, 1.65ft\right)$

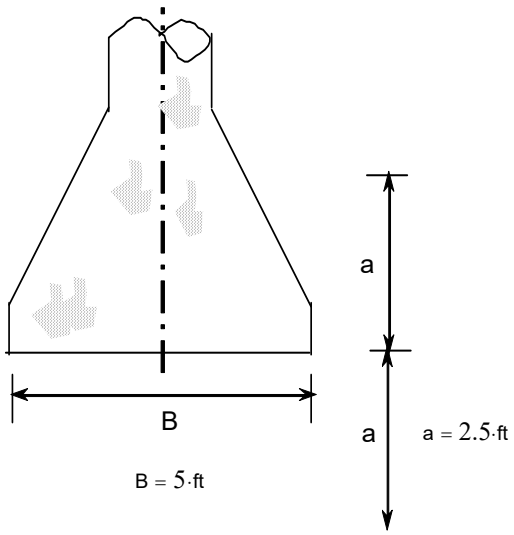


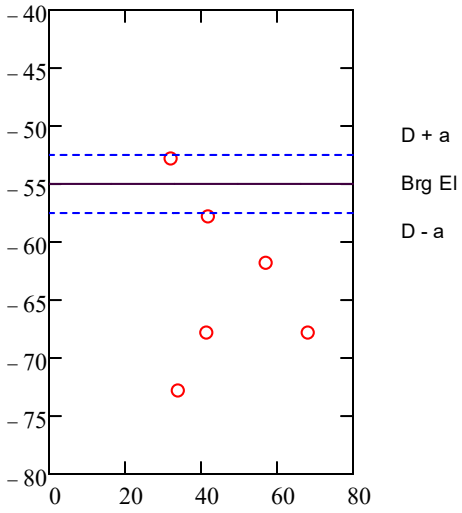
Figure 2: Influence Zone for Evaluation of Bearing Capacity

Bearing elevation: $D_1 := -55ft$

Determine the weighted average of the limit pressures between:

$D_1 + a = -52.5 \cdot ft$ and $D_1 - a = -57.5 \cdot ft$

Elevation (CCD)



Net Limit Pressure, p_{le} (tsf)

$p_{le} := \frac{32 + 41.8}{2} tsf$

$p_{le} = 36.9 \cdot tsf$

Allowable Bearing Capacity (cont'd)

The ultimate end bearing capacity of a drilled shaft is related to the limit pressure of the soil by a linear function.

$$q_l - q_0 := k \cdot (p_{le} - p_o)$$

Where,

k	Is the bearing capacity factor (1.1 < k < 2 for long piles)
p_0	is the horizontal at-rest earth pressure at the bearing level (from PMT tests)
q_0	is the total overburden pressure at the bearing level after construction

For bored piles founded in clay and silt: $k := 1.4$

Briaud recommends a factor of safety of 3: USE $FS := 3$

Bearing Elevation: $D_1 = -55 \cdot ft$

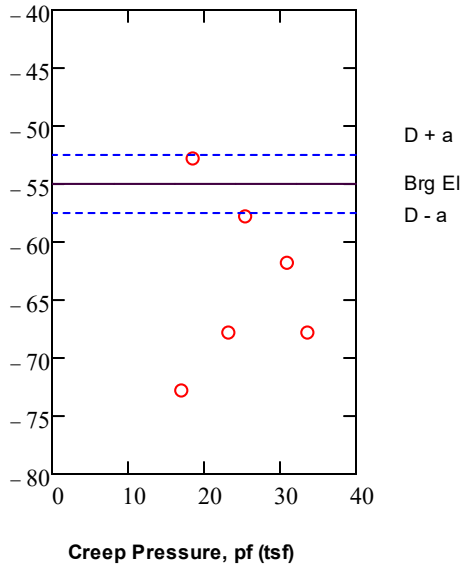
The overburden pressure: $q_0 := \gamma \cdot (D_{surf} - D_{gw}) + (\gamma - \gamma_w) \cdot (D_{gw} - D_1)$ $q_0 = 1.7 \cdot tsf$

The ultimate bearing capacity: $q_l := k \cdot (p_{le}) + q_0$ $q_l = 53.4 \cdot tsf$

The net allowable bearing capacity: $q_{all_briaud} := \frac{q_l - q_0}{FS}$ $q_{all_briaud} = 17.2 \cdot tsf$

Alternatively, Baker. recommends a factor of safety of 2.5 on k and limits the allowable bearing capacity to less than the PMT creep pressure for the sustained dead and live load plus the overburden.

Elevation (CCD)



The avg creep pressure $p_f := \frac{18.5 + 25.4}{2} \cdot tsf$ $p_f = 22 \cdot tsf$

The net allowable bearing capacity: $q_{all_baker} := \min\left[\frac{k}{2.5} \cdot (p_{le}), p_f\right]$ $q_{all_baker} = 20.7 \cdot tsf$

USE: $q_{all1} := 16 tsf$

Calculation of the Layer Moduli

The soil below the foundation level is divided into a series of elementary layers equal to 1/2 the bearing width. The average pressuremeter modulus is calculated for each layer as the harmonic mean of the PMT data.

The structure coefficient, α, is determined from the soil type and an estimation of the state of consolidation through the modulus to limit pressure ratio, E/p_l. Shape factors, introduced to accomodate non-circular sections are functions of the length to wirth ratio, L/B.

Structure coefficient (from PMT test data): $\alpha := 0.5$

Shape coefficients (for circle): $\lambda_2 := 1$ $\lambda_3 := 1$

Reference length: $R_0 := 1\,ft$

Menard's α Factors

Soil Type	Peat		Clay		Silt		Sand		Sand and Gravel	
	E/p_l*	α	E/p_l*	α	E/p_l*	α	E/p_l*	α	E/p_l*	α
Over Consolidated			>16	1	>14	2/3	>12	1/2	>10	1/3
Normally Consolidated	All	1	9–16	2/3	8-14	1/2	7-12	1/3	6-10	1/4
Weathered and/or Remolded			7-9	1/2		1/2		1/3		1/4

Rock	Extremely Fractured	Other	Slightly Fractured or Extremely Weathered
	α = 1/3	α = 1/2	α = 2/3

Determine the Equivalent Pressuremeter Moduli

Bearing elevation: $D_1 = -55\,ft$

The weighted average pressuremeter moduli of the soil (from PMT test data)

Between $D_1 = -55 \cdot ft$ and $D_1 - R = -57.5 \cdot ft$

$E_1 := 318\,tsf$ $E_1 = 318 \cdot tsf$

Between $D_1 - R = -57.5 \cdot ft$ and $D_1 - 2R = -60 \cdot ft$

$E_2 := 318\,tsf$ $E_2 = 318 \cdot tsf$

Between $D_1 - 2 \cdot R = -60 \cdot ft$ and $D_1 - 3R = -62.5 \cdot ft$

$E_3 := 599\,tsf$ $E_3 = 599 \cdot tsf$

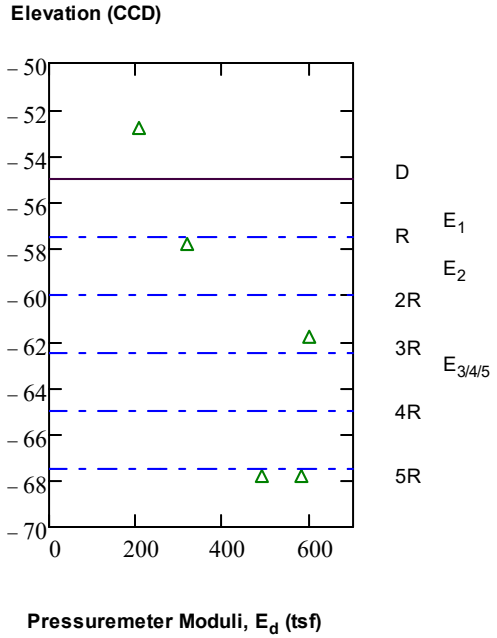
Between $D_1 - 3 \cdot R = -62.5 \cdot ft$ and $D_1 - 4R = -65 \cdot ft$

$E_4 := 599\,tsf$ $E_4 = 599 \cdot tsf$

Between $D_1 - 4 \cdot R = -65 \cdot ft$ and $D_1 - 5R = -67.5 \cdot ft$

$E_5 := \frac{490 + 581}{2}\,tsf$ $E_5 = 535.5 \cdot tsf$

$E_{3.4.5} := \frac{3}{\frac{1}{E_3} + \frac{1}{E_4} + \frac{1}{E_5}} = 576 \cdot tsf$



Determine the equivalent moduli

Spherical: $E_{A1} := E_1$ $E_{A1} = 318 \cdot tsf$

Deviatoric: $E_{B1} := \frac{3.2}{\frac{1}{E_1} + \frac{1}{0.85 \cdot E_2} + \frac{1}{E_{3.4.5}}}$ $E_{B1} = 373 \cdot tsf$

Determine the Estimated Settlement (Menard and Elastic Theory)

Bearing elevation: $D_1 = -55 ft$

Shaft length: $L := D_{surf} - D_1$ $L = 60 ft$

Maximum (Dead + Live) est settlement at $q_{max} := q_{all1} = 16 \cdot tsf$ $P_{max} := q_{max} \cdot A$ $P_{max} = 628 \cdot kip$

Spherical: $w_3 := \frac{\alpha}{4.5 \cdot E_{A1}} \cdot q_{max} \cdot \lambda_3 \cdot R$ $w_3 = 0.168 \cdot in$

Deviatoric: $w_2 := \frac{1.33 \cdot q_{max}}{3 \cdot E_{B1}} \cdot R_0 \cdot \left(\lambda_2 \cdot \frac{R}{R_0} \right)^{\alpha}$ $w_2 = 0.361 \cdot in$

Elastic shortening of shaft: $w_1 := \frac{q_{max} \cdot L}{E_c} \cdot \left(\frac{D_{shaft}}{2 \cdot R} \right)^2$ $w_1 = 0.011 \cdot in$

Total estimated settlement: $w := w_1 + w_2 + w_3$ $w = 0.54 \cdot in$

DESIGN OF END-BEARING, ROCK SOCKETED MICROPILES

BUILDING CODE AND RELATED EXCERPTS OF THE MUNICIPAL CODE OF CHICAGO, *Comprising Sections of Titles 13, 15, 18 and other related excerpts of the Municipal Code of Chicago for the Building Industry,* American Legal Publishing Corporation.
AASHTO: *Standard Specifications for Highway Bridges*, 17th Edition, 2002.

Reference:C:\Ati Files\units.xmcd

Material Dimensions and Properties

Outer Casing - Use 7 inch outside diameter x 0.498 inch wall thickness (allow 1/16" loss for corrosion)

Casing outside diameter: $OD_{casing} := 7in$ (As installed)

Casing wall thickness: $t_{casing} := 0.498in$

Pile casing inside diameter: $ID_{casing} := OD_{casing} - 2 \cdot t_{casing}$ $ID_{casing} = 6.004 \cdot in$

Casing outside diameter: $OD_{casing} := OD_{casing} - 2 \cdot \frac{1}{16}in$ (With corrosion loss) $OD_{casing} = 6.875 \cdot in$

Pile casing steel area: $Area_{casing} := \frac{\pi}{4} \cdot \left(OD_{casing}^{2} - ID_{casing}^{2}\right)$ $Area_{casing} = 8.81 \cdot in^2$

Casing yield strength: $F_{y_casing} := 80ksi$

Modulus of elasticity: $E_s := 29000ksi$

Total casing length: $L_{casing} := 82ft$ (Estimated maximum)

Reinforcing bar - #9 Threadbar ASTM A615 (Grade 75)

Bar diameter: $d_{bar} := 1.125in$

Bar area: $Area_{bar} := 1in^2$

Bar steel yield strength: $F_{y_bar} := 75ksi$

Strain compatability - Use minimum of the casing and the reinforcement yield strength

Design steel yield strength: $F_{y_steel} := if\left(d_{bar} = 0, F_{y_casing}, \min\left(F_{y_casing}, F_{y_bar}\right)\right)$ $F_{y_steel} = 75 \cdot ksi$

Cement grout - Use neat cement grout

Grout area in casing: $Area_{grout} := \frac{\pi}{4} \cdot ID_{casing}^{2} - Area_{bar}$ $Area_{grout} = 27.3 \cdot in^2$

Grout compressive strength: $f'_c := 5000psi$

Modulus of elasticity: $E_{c_grout} := 57000 \cdot \sqrt{f'_c \cdot psi}$ $E_{c_grout} = 4030.5 \cdot ksi$

Design Load

The axial design load (per pile)

Compression: $DL_c := 110kip$ total load 430 (4 piles per cap)

Tension: $DL_t := 0kip$

Concrete-Filled Steel Pipe Piles (Section 18, Chicago Code)

Allowable Compressive Stress in Steel

Allowable stress in steel: $F_{y_allowable_ch} := \min(0.35 \cdot F_{y_steel}, 28\text{ksi})$ $F_{y_allowable_ch} = 26.25\cdot\text{ksi}$

Note: Section 18(13-132-300) limits the stress to 12 ksi. The use of higher stresses was authorized by the June 15, 2017 CDOB Code Memorandum for Pile Deep Foundations.

Compression - Allowable Load

Allowable axial load: $P_{c_chicago_cased} := 0.40 \cdot f'_c \cdot Area_{grout} + F_{y_allowable_ch} \cdot (Area_{casing} + Area_{bar})$

Note: 0.40 is per Section 18 (13-132-270)

$P_{c_chicago_cased} = 312.1\cdot\text{kip}$

Check Stresses at Design Load

Assume strain compatibility between steel casing and the grout. Calculate stress levels in materials for applied load. Transform steel to grout based on relative moduli $A_s(E_s/E_c)$ and grout to steel $A_c(E_c/E_s)$

Stress in concrete: $\sigma_c := \dfrac{DL_c}{(Area_{casing} + Area_{bar}) \cdot \dfrac{E_s}{E_{c_grout}} + Area_{grout}}$ $\sigma_c = 1.1\cdot\text{ksi}$

Stress in steel: $\sigma_s := \dfrac{DL_c}{(Area_{casing} + Area_{bar}) + Area_{grout} \cdot \dfrac{E_{c_grout}}{E_s}}$ $\sigma_s = 8.08\cdot\text{ksi}$

Poisson's ratio (grout): $\nu_{grout} := 0.25$

Radial displacement of the grout: $\Delta R := \dfrac{ID_{casing}}{2} \cdot \nu_{grout} \cdot \dfrac{\sigma_c}{E_{c_grout}}$ $\Delta R = 0.000209\cdot\text{in}$

Grout Stress Approach 1 - Reduced axial stress

For strain compatibility, the radial deflection of the casing must be equal to the displacement of the grout. For a uniform radial pressure, q the radial displacement of the circumference of a thin-walled pressure vessel $\Delta R = qR^2/Et$ (where, R is the inside diameter and t is the wall thickness). Setting the equations equal and solving for the radial stress, we have:

Radial stress: $\sigma_3 := \dfrac{E_s \cdot t_{casing} \cdot \nu_{grout}}{\dfrac{ID_{casing}}{2} \cdot E_{c_grout}} \cdot \sigma_c$ $\sigma_3 = 335.3\cdot\text{psi}$

Effective stress in grout: $\sigma_{eff_grout} := \sigma_c - \sigma_3$ $\sigma_{eff_grout} = 0.8\cdot\text{ksi}$

Stress ratio in grout: $\%f'_c := \dfrac{\sigma_{eff_grout}}{f'_c}$ (Must be less than or equal to 0.40) $\%f'_c = 0.16$

Grout Stress Approach 2 - Effective increased grout strength

Ref.: *Confinement Model for High Strength Concrete*,Razvi and Saatcioglu, Journal of Structural Engineering, March, 1999.

For an assumed uniform lateral pressure, the strength of confined concrete can be calculated as:

Confined grout strength: $f'_{cc} := f'_c + \left[6.7 \cdot \left(\dfrac{\sigma_3}{\text{psi}}\right)^{-0.17}\right] \cdot \sigma_3$ $f'_{cc} = 5835.9\cdot\text{psi}$

Stress ratio in grout: $\%f'_{cc} := \dfrac{\sigma_c}{f'_{cc}}$ (< 0.40) $\%f'_{cc} = 0.193$

Steel Stress

Internal yield strength of casing: $F_{y_int} := 9960\text{psi}$ (Open end)

Combined stress: $\sigma_{steel} := \dfrac{\sigma_s}{F_{y_allowable_ch}} + \dfrac{\sigma_3}{0.6 \cdot F_{y_int}}$ (< 1.0) $\sigma_{steel} = 0.36$

Geotechnical Design (AASHTO Articles 4.4.8 and 4.6.5)

Material Properties

Rock socket - dolomite limestone bedrock

Rock socket diameter: $Dia_{socket} := 7.5in$ (Roller Cone diameter)

Depth of provided socket: $D_{socket} := 2ft$

Elastic modulus of intact rock: $E_0 := 5700ksi$ (From AASHTO Table 4.4.8.2.2B for limestone)

Rock RQD: $RQD := 74$

Reduction factor: $\alpha_E := \max(0.023 \cdot RQD - 1.32, 0.15)$ $\alpha_E = 0.382$

Elastic modulus of rock mass: $E_m := \alpha_E \cdot E_0$ $E_m = 2177.4 \cdot ksi$

Uniaxial compressive strength: $C_0 := 10500psi$

Unc. strength of rock mass: $C_m := \alpha_E \cdot C_0$ $C_m = 4.011 \cdot ksi$

Determine Rock Mass Quality - Rock Mass Rating (after Bienawski, 1989), or Norwegian Geotechnical Institute System (after Barton, 1974)

Rock Mass Rating (RMR): $RMR := 70$

Based on RMR, the dolomite classifies as "Good to Very Good" Rock from AASTO Table 4.4.8.1.2A

Coefficient factor: $N_{ms} := \frac{1.4 - 0.28}{85 - 65} \cdot (RMR - 65) + 0.28$ (interpolated) $N_{ms} = 0.56$

Ult. bearing capacity on rock: $q_{ult} := N_{ms} \cdot C_0$ $q_{ult} = 5.88 \cdot ksi$

Axial Capacity in Rock

Unconfined compressive strength of rock, or concrete, whichever is weaker: $\sigma_c := \min(f'_c, C_m)$ $\sigma_c = 4011 \cdot psi$

Ult. rock socket unit side resistance: $q_{sr} := 10^{\frac{1}{2} \cdot \log\left(\frac{\sigma_c}{psi}\right) + 0.4532} \cdot psi$ (From AASHTO Figure 4.6.5.3.1A)

$q_{sr} = 180 \cdot psi$

$Q_{sr} := \pi \cdot Dia_{socket} \cdot D_{socket} \cdot q_{sr}$ $Q_{sr} = 102 \cdot kip$

Ult. tip resistance: $Q_{tr} := N_{ms} \cdot C_0 \cdot \frac{\pi \cdot Dia_{socket}^2}{4}$ $Q_{tr} = 260 \cdot kip$

Note: Per AASHTO 4.6.5.4 apply a factor of safety of 2.0 against bearing capacity failure when the design is based on the results of a load test conducted at the site. Otherwise, apply a minimum factor of safety of 2.5.

Factor of safety: $FS := 2.0$

Allowable compression: $Q_{c_aashto} := \frac{Q_{sr} + Q_{tr}}{FS}$ $Q_{c_aashto} = 181 \cdot kip$

Allowable tension: $Q_{t_aashto} := 0.7 \cdot \frac{Q_{sr}}{FS}$ $Q_{t_aashto} = 36 \cdot kip$

Reinforcement tensile capacity: $Q_{t_bar} := 0.6 \cdot F_{y_bar} \cdot Area_{bar}$ $Q_{t_bar} = 45 \cdot kip$

Estimated Settlement of Piles Socketed into Rock

Elastic compression/elongation of cased length

Transformed (to steel) area: $A_{cased} := \frac{E_{c_grout}}{E_s} \cdot Area_{grout} + Area_{casing} + Area_{bar}$ $A_{cased} = 13.6 \cdot in^2$

Settlement due to elastic shortening: $\rho_{s_cased} := \frac{DL_c \cdot L_{casing}}{A_{cased} \cdot E_s}$ $\rho_{s_cased} = 0.27 \cdot in$

Uplift due to elastic elongation: $\rho_{u_cased} := \frac{DL_t \cdot L_{casing}}{A_{cased} \cdot E_s}$ $\rho_{u_cased} = 0 \cdot in$

Settlement in socket

Transformed (to grout) socket area: $A_{socket} := \frac{E_s}{E_{c_grout}} \cdot \left(Area_{casing} + Area_{bar}\right) + Area_{grout}$ $A_{socket} = 97.9 \cdot in^2$

Refer to AASHTO Figure 4.6.5.5.2A and Figure 4.6.5.5.2B

$Dr_over_Br := \frac{D_{socket}}{Dia_{socket}}$ $Dr_over_Br = 3.2$

$Ec_over_Em := \frac{E_{c_grout}}{E_m}$ $Ec_over_Em = 1.9$

Influence coefficient for elastic settlement: $I_{ps} := 0.35$ (Interpolated from Figure 4.6.5.5.2A)

Influence coefficient for uplift displacement: $I_{pu} := 0.35$ (Interpolated from Figure 4.6.5.5.2B)

Settlement at butt (includes elastic shortening): $\rho_{s_socket} := DL_c \cdot \left(\frac{I_{ps}}{Dia_{socket} \cdot E_m} + \frac{D_{socket}}{A_{socket} \cdot E_{c_grout}}\right)$ $\rho_{s_socket} = 0.009 \cdot in$

Uplift displacement (includes elastic shortening): $\rho_{u_socket} := DL_t \cdot \left(\frac{I_{pu}}{Dia_{socket} \cdot E_m} + \frac{D_{socket}}{A_{socket} \cdot E_{c_grout}}\right)$ $\rho_{u_socket} = 0 \cdot in$

Total settlement of micropile: $\rho_s := \rho_{s_cased} + \rho_{s_socket}$ $\rho_s = 0.28 \cdot in$

Total uplift of micropile: $\rho_u := \rho_{u_cased} + \rho_{u_socket}$ $\rho_u = 0 \cdot in$

VERIFY ALLOWABLE AXIAL LOADS

	Tension	Compression
Structural Capacity		
Cased - Chicago Code with Center Steel (Tension)	$Q_{t_bar} = 45 \cdot kip$	$P_{c_chicago_cased} = 312 \cdot kip$
Geotechnical Capacity (with FS = 2.0)		
2' Rock Socket - AASHTO	$Q_{t_aashto} = 36 \cdot kip$	$Q_{c_aashto} = 181 \cdot kip$
Estimated Settlement		
Elastic Settlement at Design Load		$\rho_s = 0.28 \cdot in$
Elastic Uplift at Design Load		$\rho_u = 0 \cdot in$

DESIGN OF END-BEARING, ROCK SOCKETED MICROPILES

BUILDING CODE AND RELATED EXCERPTS OF THE MUNICIPAL CODE OF CHICAGO, *Comprising Sections of Titles 13, 15, 18 and other related excerpts of the Municipal Code of Chicago for the Building Industry,* American Legal Publishing Corporation.
AASHTO: *Standard Specifications for Highway Bridges*, 17th Edition, 2002.

Reference:C:\Ati Files\units.xmcd

Material Dimensions and Properties

Outer Casing - Use 9.625 inch outside diameter x 0.545 inch wall thickness (allow 1/16" loss for corrosion)

Casing outside diameter:	$OD_{casing} := 9.625in$	(As installed)	
Casing wall thickness:	$t_{casing} := 0.545in$		
Pile casing inside diameter:	$ID_{casing} := OD_{casing} - 2 \cdot t_{casing}$		$ID_{casing} = 8.535 \cdot in$
Casing outside diameter:	$OD_{casing} := OD_{casing} - 2 \cdot \frac{1}{16}in$	(With corrosion loss)	$OD_{casing} = 9.5 \cdot in$
Pile casing steel area:	$Area_{casing} := \frac{\pi}{4} \cdot \left(OD_{casing}^2 - ID_{casing}^2\right)$		$Area_{casing} = 13.67 \cdot in^2$
Casing yield strength:	$F_{y_casing} := 80ksi$		
Modulus of elasticity:	$E_s := 29000ksi$		
Total casing length:	$L_{casing} := 82ft$	(Estimated maximum)	

Reinforcing bar - #11 Threadbar ASTM A615 (Grade 75)

Bar diameter:	$d_{bar} := 1.375in$	
Bar area:	$Area_{bar} := 1.56in^2$	
Bar steel yield strength:	$F_{y_bar} := 75ksi$	

Strain compatability - Use minimum of the casing and the reinforcement yield strength

Design steel yield strength:	$F_{y_steel} := if\left(d_{bar} = 0, F_{y_casing}, \min\left(F_{y_casing}, F_{y_bar}\right)\right)$	$F_{y_steel} = 75 \cdot ksi$

Cement grout - Use neat cement grout

Grout area in casing:	$Area_{grout} := \frac{\pi}{4} \cdot ID_{casing}^2 - Area_{bar}$	$Area_{grout} = 55.7 \cdot in^2$
Grout compressive strength:	$f'_c := 5000psi$	
Modulus of elasticity:	$E_{c_grout} := 57000 \cdot \sqrt{f'_c \cdot psi}$	$E_{c_grout} = 4030.5 \cdot ksi$

Design Load

The axial design load (per pile)

Compression:	$DL_c := 110kip$	total load 430 (4 piles per cap)
Tension:	$DL_t := 35kip$	

Concrete-Filled Steel Pipe Piles (Section 18, Chicago Code)

Allowable Compressive Stress in Steel

Allowable stress in steel: $F_{y_allowable_ch} := \min(0.35 \cdot F_{y_steel}, 28ksi)$ $F_{y_allowable_ch} = 26.25 \cdot ksi$

Note: Section 18(13-132-300) limits the stress to 12 ksi. The use of higher stresses was authorized by the June 15, 2017 CDOB Code Memorandum for Pile Deep Foundations.

Compression - Allowable Load

Allowable axial load: $P_{c_chicago_cased} := 0.40 \cdot f'_c \cdot Area_{grout} + F_{y_allowable_ch} \cdot (Area_{casing} + Area_{bar})$

Note: 0.40 is per Section 18 (13-132-270)

$P_{c_chicago_cased} = 511.1 \cdot kip$

Check Stresses at Design Load

Assume strain compatibility between steel casing and the grout. Calculate stress levels in materials for applied load. Transform steel to grout based on relative moduli $A_s(E_s/E_c)$ and grout to steel $A_c(E_c/E_s)$

Stress in concrete: $\sigma_c := \frac{DL_c}{(Area_{casing} + Area_{bar}) \cdot \frac{E_s}{E_{c_grout}} + Area_{grout}}$ $\sigma_c = 0.7 \cdot ksi$

Stress in steel: $\sigma_s := \frac{DL_c}{(Area_{casing} + Area_{bar}) + Area_{grout} \cdot \frac{E_{c_grout}}{E_s}}$ $\sigma_s = 4.79 \cdot ksi$

Poisson's ratio (grout): $\nu_{grout} := 0.25$

Radial displacement of the grout: $\Delta R := \frac{ID_{casing}}{2} \cdot \nu_{grout} \cdot \frac{\sigma_c}{E_{c_grout}}$ $\Delta R = 0.000176 \cdot in$

Grout Stress Approach 1 - Reduced axial stress

For strain compatibility, the radial deflection of the casing must be equal to the displacement of the grout. For a uniform radial pressure, q the radial displacement of the circumference of a thin-walled pressure vessel $\Delta R = qR^2/Et$ (where, R is the inside diameter and t is the wall thickness). Setting the equations equal and solving for the radial stress, we have:

Radial stress: $\sigma_3 := \frac{E_s \cdot t_{casing} \cdot \nu_{grout}}{\frac{ID_{casing}}{2} \cdot E_{c_grout}} \cdot \sigma_c$ $\sigma_3 = 152.9 \cdot psi$

Effective stress in grout: $\sigma_{eff_grout} := \sigma_c - \sigma_3$ $\sigma_{eff_grout} = 0.5 \cdot ksi$

Stress ratio in grout: $\%f'_c := \frac{\sigma_{eff_grout}}{f'_c}$ (Must be less than or equal to 0.40) $\%f'_c = 0.1$

Grout Stress Approach 2 - Effective increased grout strength

Ref.: *Confinement Model for High Strength Concrete*,Razvi and Saatcioglu, Journal of Structural Engineering, March, 1999.

For an assumed uniform lateral pressure, the strength of confined concrete can be calculated as:

Confined grout strength: $f'_{cc} := f'_c + \left[6.7 \cdot \left(\frac{\sigma_3}{psi}\right)^{-0.17}\right] \cdot \sigma_3$ $f'_{cc} = 5435.7 \cdot psi$

Stress ratio in grout: $\%f'_{cc} := \frac{\sigma_c}{f'_{cc}}$ (< 0.40) $\%f'_{cc} = 0.12$

Steel Stress

Internal yield strength of casing: $F_{y_int} := 9960psi$ (Open end)

Combined stress: $\sigma_{steel} := \frac{\sigma_s}{F_{y_allowable_ch}} + \frac{\sigma_3}{0.6 \cdot F_{y_int}}$ (< 1.0) $\sigma_{steel} = 0.21$

Geotechnical Design (AASHTO Articles 4.4.8 and 4.6.5)

Material Properties

Rock socket - dolomite limestone bedrock

Rock socket diameter: $Dia_{socket} := 10in$ (Roller Cone diameter)

Depth of provided socket: $D_{socket} := 2ft$

Elastic modulus of intact rock: $E_0 := 5700ksi$ (From AASHTO Table 4.4.8.2.2B for limestone)

Rock RQD: $RQD := 74$

Reduction factor: $\alpha_E := \max(0.023 \cdot RQD - 1.32, 0.15)$ $\alpha_E = 0.382$

Elastic modulus of rock mass: $E_m := \alpha_E \cdot E_0$ $E_m = 2177.4 \cdot ksi$

Uniaxial compressive strength: $C_0 := 10500psi$

Unc. strength of rock mass: $C_m := \alpha_E \cdot C_0$ $C_m = 4.011 \cdot ksi$

Determine Rock Mass Quality - Rock Mass Rating (after Bienawski, 1989), or Norwegian Geotechnical Institute System (after Barton, 1974)

Rock Mass Rating (RMR): $RMR := 70$

Based on RMR, the dolomite classifies as "Good to Very Good" Rock from AASTO Table 4.4.8.1.2A

Coefficient factor: $N_{ms} := \frac{1.4 - 0.28}{85 - 65} \cdot (RMR - 65) + 0.28$ (interpolated) $N_{ms} = 0.56$

Ult. bearing capacity on rock: $q_{ult} := N_{ms} \cdot C_0$ $q_{ult} = 5.88 \cdot ksi$

Axial Capacity in Rock

Unconfined compressive strength of rock, or concrete, whichever is weaker: $\sigma_c := \min(f'_c, C_m)$ $\sigma_c = 4011 \cdot psi$

Ult. rock socket unit side resistance: $q_{sr} := 10^{\frac{1}{2} \cdot \log\left(\frac{\sigma_c}{psi}\right) + 0.4532} \cdot psi$ (From AASHTO Figure 4.6.5.3.1A)

$q_{sr} = 180 \cdot psi$

$Q_{sr} := \pi \cdot Dia_{socket} \cdot D_{socket} \cdot q_{sr}$ $Q_{sr} = 136 \cdot kip$

Ult. tip resistance: $Q_{tr} := N_{ms} \cdot C_0 \cdot \frac{\pi \cdot Dia_{socket}^2}{4}$ $Q_{tr} = 462 \cdot kip$

Note: Per AASHTO 4.6.5.4 apply a factor of safety of 2.0 against bearing capacity failure when the design is based on the results of a load test conducted at the site. Otherwise, apply a minimum factor of safety of 2.5.

Factor of safety: $FS := 2.0$

Allowable compression: $Q_{c_aashto} := \frac{Q_{sr} + Q_{tr}}{FS}$ $Q_{c_aashto} = 299 \cdot kip$

Allowable tension: $Q_{t_aashto} := 0.7 \cdot \frac{Q_{sr}}{FS}$ $Q_{t_aashto} = 47 \cdot kip$

lesser of these two

Reinforcement tensile capacity: $Q_{t_bar} := 0.6 \cdot F_{y_bar} \cdot Area_{bar}$ $Q_{t_bar} = 70.2 \cdot kip$

Estimated Settlement of Piles Socketed into Rock

Elastic compression/elongation of cased length

Transformed (to steel) area: $A_{cased} := \frac{E_{c_grout}}{E_s} \cdot Area_{grout} + Area_{casing} + Area_{bar}$ $A_{cased} = 23 \cdot in^2$

Settlement due to elastic shortening: $\rho_{s_cased} := \frac{DL_c \cdot L_{casing}}{A_{cased} \cdot E_s}$ $\rho_{s_cased} = 0.16 \cdot in$

Uplift due to elastic elongation: $\rho_{u_cased} := \frac{DL_t \cdot L_{casing}}{A_{cased} \cdot E_s}$ $\rho_{u_cased} = 0.05 \cdot in$

Settlement in socket

Transformed (to grout) socket area: $A_{socket} := \frac{E_s}{E_{c_grout}} \cdot \left(Area_{casing} + Area_{bar}\right) + Area_{grout}$ $A_{socket} = 165.2 \cdot in^2$

Refer to AASHTO Figure 4.6.5.5.2A and Figure 4.6.5.5.2B

$Dr_over_Br := \frac{D_{socket}}{Dia_{socket}}$ $Dr_over_Br = 2.4$

$Ec_over_Em := \frac{E_{c_grout}}{E_m}$ $Ec_over_Em = 1.9$

Influence coefficient for elastic settlement: $I_{ps} := 0.35$ (Interpolated from Figure 4.6.5.5.2A)

Influence coefficient for uplift displacement: $I_{pu} := 0.35$ (Interpolated from Figure 4.6.5.5.2B)

Settlement at butt (includes elastic shortening): $\rho_{s_socket} := DL_c \cdot \left(\frac{I_{ps}}{Dia_{socket} \cdot E_m} + \frac{D_{socket}}{A_{socket} \cdot E_{c_grout}}\right)$ $\rho_{s_socket} = 0.006 \cdot in$

Uplift displacement (includes elastic shortening): $\rho_{u_socket} := DL_t \cdot \left(\frac{I_{pu}}{Dia_{socket} \cdot E_m} + \frac{D_{socket}}{A_{socket} \cdot E_{c_grout}}\right)$ $\rho_{u_socket} = 0.0018 \cdot in$

Total settlement of micropile: $\rho_s := \rho_{s_cased} + \rho_{s_socket}$ $\rho_s = 0.17 \cdot in$

Total uplift of micropile: $\rho_u := \rho_{u_cased} + \rho_{u_socket}$ $\rho_u = 0.05 \cdot in$

VERIFY ALLOWABLE AXIAL LOADS

	Tension	Compression
Structural Capacity		
Cased - Chicago Code with Center Steel (Tension)	$Q_{t_bar} = 70 \cdot kip$	$P_{c_chicago_cased} = 511 \cdot kip$
Geotechnical Capacity (with FS = 2.0)		
2' Rock Socket - AASHTO	$Q_{t_aashto} = 47 \cdot kip$	$Q_{c_aashto} = 299 \cdot kip$
Estimated Settlement		
Elastic Settlement at Design Load		$\rho_s = 0.17 \cdot in$
Elastic Uplift at Design Load		$\rho_u = 0.05 \cdot in$

2.5-FT DIAMETER SHAFT

Determine the dead weight of the concrete caisson and the soil adjacent to the shaft located within a cylindrical vertical projection of the bell diameter. To simplify the calculation, the soil annulus is extended to the bearing elevation, and the weight of the caisson bell concrete is ignored.

Shafts in cohesive soil are designed by total stress methods for undrained (short term) loading conditions. Shafts in cohesionless soil, and shafts subject to permanent uplift loads are designed by effective stress methods.

Where:

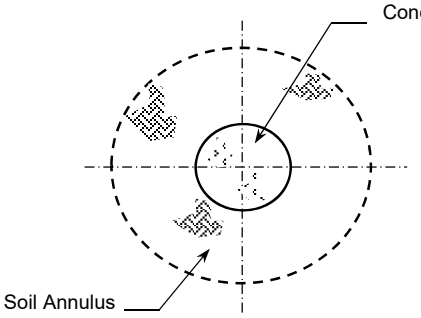
$$P_{dead\ wt} = P_{conc} + P_{soil}$$

$$P_{conc} = \frac{\pi}{4}(D_{shaft})^2 L \gamma_{conc}$$

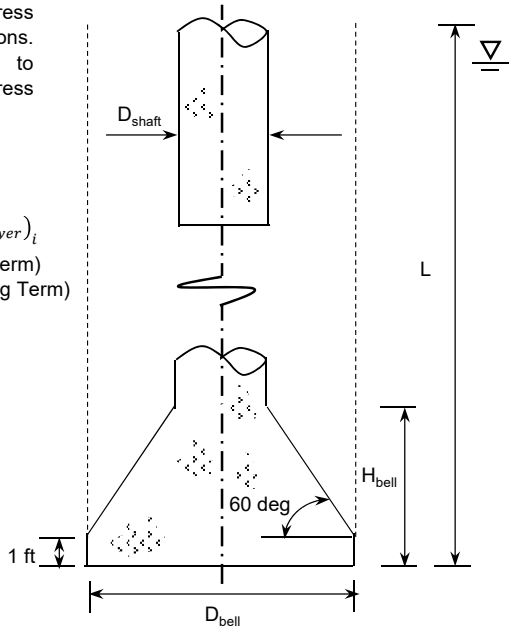
$$P_{soil} = \frac{\pi}{4}\left[(D_{bell})^2 - (D_{shaft})^2\right]\sum(\gamma_{soil} L_{layer})_i$$

Undrained: $\gamma = \gamma_{total}$ (Cohesive, Short Term)

Drained: $\gamma = \gamma' = \gamma_{total} - \gamma_w$ (Noncohesive, Long Term)



Idealized Section for Dead Weight



Projected Soil Annulus above Caisson Bell

Grnd Wtr = **10**

D_{shaft} = **2.5 ft**

L = **68 ft**

D_{bell} = **2.5**

γ_{conc} = 150 pcf γ_w = 62.4 pcf

Determine the side resistance as the summation of the average shear mobilized in the soil layers along the caisson shaft. The top 5 ft, and a length equal to one shaft diameter above the bell, is ignored in the calculation. The resistance in uplift is limited to 70% that developed in compression.

$$P_f = \pi D_{shaft} \sum(f_s \Delta z_{layer})_i$$

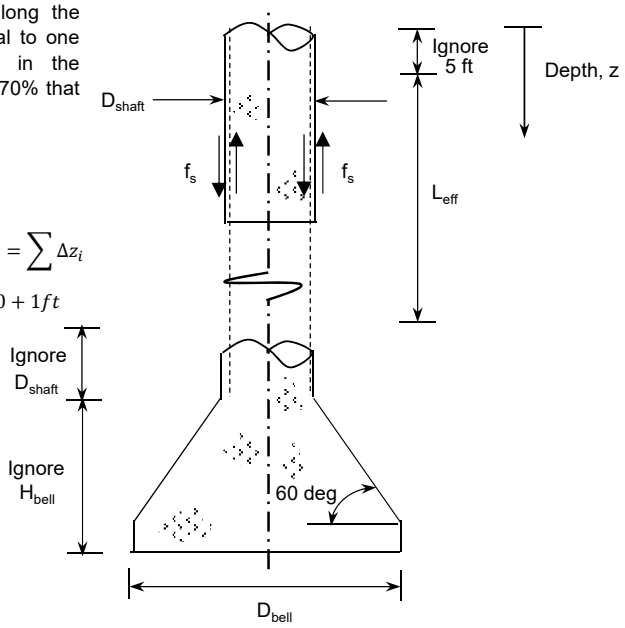
Where:

$$f_s = 0.7 \alpha S_u$$

$$L_{eff} = L - H_{bell} - D_{shaft} - 5ft = \sum \Delta z_i$$

$$H_{bell} = \frac{1}{2}(D_{bell} - D_{shaft}) \tan 60 + 1ft$$

For straight-shafts, the side resistance is determined as the average shear mobilized in the soil layers along the shaft excluding the upper 5 ft and the bottom 1 shaft diameter. The dead weight is limited to the shaft concrete.



Idealized Geometry for Side Resistance

L_{eff} = **59.5 ft**

H_{bell} = **1.0 ft**

Total Uplift Resistance: $P_{uplift} = P_{dead\ wt} + P_f$

SOIL PROFILE THROUGH CAISSON LENGTH

L_{eff} = 59.5 ft

		Material	Depth to T/Layer, z	Thickness, Δz	Unit Wt Total, γ	Unit Wt Eff, γ'	Shear Strength, S_u
Top 5 ft	1	Fill	0.0	5.0	120	120	
	2	Med Dense Silty Sand	0.0	4.0	115	115	
	3	Stiff to V Stiff Clay	4.0	10.0	125	125	1500
	4	Soft Silty Clay	14.0	25.0	125	62.6	700
	5	Stiff Silty Clay	39.0	20.5	125	62.6	2000
	6	Very Stiff Clay	59.5	0.0	130	67.6	2000
	7	Very Stiff to Hard Clay	59.5	0.0	130	67.6	2000
Btm 1 Shaft Dia	8	Hard Silty Clay (Hardpan)	64.5	2.5	122	59.6	2000
Top 1/2 Bell	9	Hard Silty Clay (Hardpan)	67.0	0.5	135	72.6	2000
Btm 1/2 Bell	10	Hard Silty Clay (Hardpan)	67.5	0.5	135	72.6	2000
			Total Length, L=	68.0	ft		

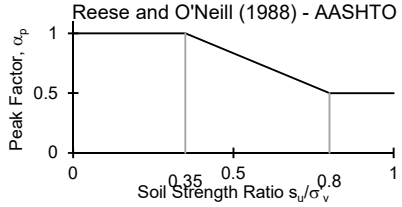
TOTAL STRESS

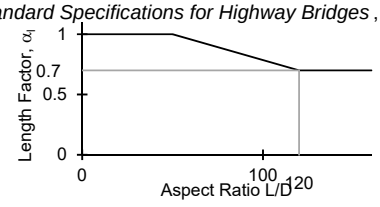
Dead Wt (kip) Soil, P_{soil}	Dead Wt (kip) Conc, P_{conc}	Peak Factor, α_p	Length Factor, α_l	Side Resistance Unit, f_s (ksf)	Side Resistance Ult, P_f (kip)	
0	4	-	-	-	-	Top 5 ft
0	3	1.00	1.00	0.95	30	
0	7	0.50	1.00	0.75	59	
0	11	1.00	1.00	0.70	137	
0	9	0.90	1.00	1.79	289	D_{shaft}
0	0	0.96	1.00	1.92	0	
0	0	0.96	1.00	1.92	0	
0	1	-	-	-	-	Btm 1 Shaft Dia
0	0	-	-	-	-	
0	0	-	-	-	-	
Σ = 0	35				515	

Ultimate Uplift Resistance

$$P_{dead\ wt} = P_{conc} + P_{soil} \quad 35 \text{ kip}$$
$$P_f = 0.7\pi D_{shaft} \sum_i \left(f_s \Delta z_{layer}\right)_i \quad 360 \text{ kip}$$
$$P_{uplift} = P_{dead\ wt} + P_f \quad 396 \text{ kip}$$

Reese and O'Neill (1988) - AASHTO *Standard Specifications for Highway Bridges*, 17th Ed, 2002 (Article 4.6.5.1)





Aschenbrener and Olson (1984) - ITL TR-005: *Theoretical Manual for Pile Foundations*, USACE ERDC, November 2000

Side Resistance in Cohesive Soil

$$Q_s = \pi B \sum \alpha_i S_{ui} \Delta z_i$$
$$\alpha_i = \alpha_p \alpha_l$$

Side Resistance in Cohesionless Soil

$$Q_s = \pi B \sum \sigma'_{zi} \beta_i \Delta z_i$$
$$\beta_i = 1.5 - 0.135\sqrt{z_i} \qquad 1.2 > \beta_i > 0.25$$

EFFECTIVE STRESS

Dead Wt (kip) Soil, P_{soil}	Dead Wt (kip) Conc, P_{conc}	Eff Overburden, σ_z' Layer	Eff Overburden, σ_z' Midpoint	Load Trnsfr Factor, β	Side Resistance Unit, f_s (ksf)	Side Resistance Ult, P_f (kip)	
0	4	600	-	-	-	-	Top 5 ft
0	3	460	830	1.14	0.95	30	
0	7	1250	1685	0.99	1.68	132	
0	11	1565	3093	0.74	2.30	451	
0	9	1283	4517	0.51	2.28	368	D_{shaft}
0	0	0	5158	0.42	2.14	0	
0	0	0	5158	0.42	2.14	0	
0	1	149	5233	-	-	-	Btm 1 Shaft Dia
0	0	36	5325	-	-	-	
0	0	36	5362	-	-	-	
Σ = 0	35					980	

Ultimate Uplift Resistance

$$P_{dead\ wt} = P_{conc} + P_{soil} \quad 35 \text{ kip}$$
$$P_f = 0.7\pi D_{shaft} \sum_i \left(f_s \Delta z_{layer}\right)_i \quad 686 \text{ kip}$$
$$P_{uplift} = P_{dead\ wt} + P_f \quad 721 \text{ kip}$$

2.5-FT DIAMETER SHAFT WITH 5-FT DIAMETER BELL

Determine the dead weight of the concrete caisson and the soil adjacent to the shaft located within a cylindrical vertical projection of the bell diameter. To simplify the calculation, the soil annulus is extended to the bearing elevation, and the weight of the caisson bell concrete is ignored.

Shafts in cohesive soil are designed by total stress methods for undrained (short term) loading conditions. Shafts in cohesionless soil, and shafts subject to permanent uplift loads are designed by effective stress methods.

Where:

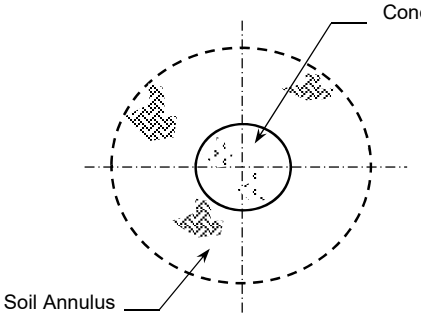
$$P_{dead\ wt} = P_{conc} + P_{soil}$$

$$P_{conc} = \frac{\pi}{4}(D_{shaft})^2 L \gamma_{conc}$$

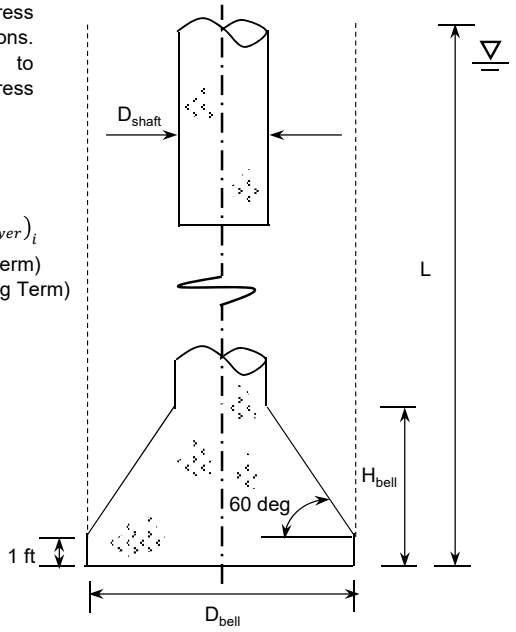
$$P_{soil} = \frac{\pi}{4}\left[(D_{bell})^2 - (D_{shaft})^2\right]\sum(\gamma_{soil} L_{layer})_i$$

Undrained: $\gamma = \gamma_{total}$ (Cohesive, Short Term)

Drained: $\gamma = \gamma' = \gamma_{total} - \gamma_w$ (Noncohesive, Long Term)



Idealized Section for Dead Weight



Projected Soil Annulus above Caisson Bell

Grnd Wtr =	10		
D_{shaft} =	2.5 ft		
L =	68 ft		
D_{bell} =	5		
γ_{conc} =	150 pcf	γ_w =	62.4 pcf

Determine the side resistance as the summation of the average shear mobilized in the soil layers along the caisson shaft. The top 5 ft, and a length equal to one shaft diameter above the bell, is ignored in the calculation. The resistance in uplift is limited to 70% that developed in compression.

$$P_f = \pi D_{shaft} \sum(f_s \Delta z_{layer})_i$$

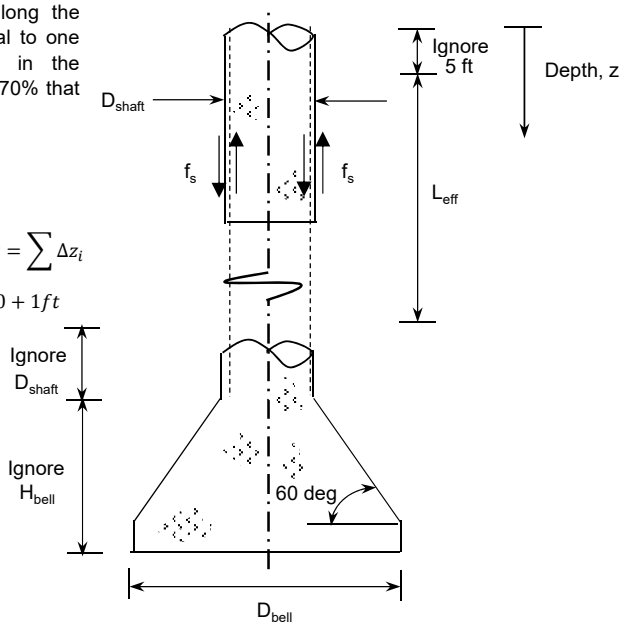
Where:

$$f_s = 0.7 \alpha S_u$$

$$L_{eff} = L - H_{bell} - D_{shaft} - 5ft = \sum \Delta z_i$$

$$H_{bell} = \frac{1}{2}(D_{bell} - D_{shaft}) \tan 60 + 1ft$$

For straight-shafts, the side resistance is determined as the average shear mobilized in the soil layers along the shaft excluding the upper 5 ft and the bottom 1 shaft diameter. The dead weight is limited to the shaft concrete.



Idealized Geometry for Side Resistance

L_{eff} =	57.3 ft
H_{bell} =	3.2 ft

Total Uplift Resistance: $P_{uplift} = P_{dead\ wt} + P_f$

SOIL PROFILE THROUGH CAISSON LENGTH

		Material	Depth to T/Layer, z	Thickness, Δz	Unit Wt Total, γ	Unit Wt Eff, γ'	Shear Strength, S_u
Top 5 ft	1	Fill	**0.0**	**5.0**	120	120	
	2	Med Dense Silty Sand	0.0	4.0	115	115	
	3	Stiff to V Stiff Clay	4.0	10.0	125	125	1500
	4	Soft Silty Clay	14.0	25.0	125	62.6	700
L_{eff} = **57.3 ft**	5	Stiff Silty Clay	39.0	18.3	125	62.6	2000
	6	Very Stiff Clay	57.3	0.0	130	67.6	2000
	7	Very Stiff to Hard Clay	57.3	0.0	130	67.6	2000
Btm 1 Shaft Dia	8	Hard Silty Clay (Hardpan)	**62.3**	**2.5**	122	59.6	2000
Top 1/2 Bell	9	Hard Silty Clay (Hardpan)	**64.8**	**1.6**	135	72.6	2000
Btm 1/2 Bell	10	Hard Silty Clay (Hardpan)	**66.4**	**1.6**	135	72.6	2000

Total Length, L= 68.0 ft

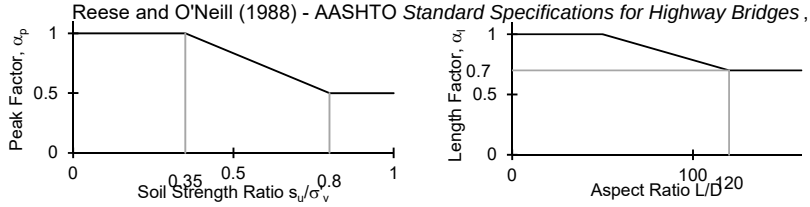
TOTAL STRESS

Dead Wt (kip) Soil, P_{soil}	Dead Wt (kip) Conc, P_{conc}	Peak Factor, α_p	Length Factor, α_l	Side Resistance Unit, f_s (ksf)	Side Resistance Ult, P_f (kip)	
9	4	-	-	-	-	Top 5 ft
7	3	1.00	1.00	0.95	30	
18	7	0.50	1.00	0.75	59	
46	11	1.00	1.00	0.70	137	
34	8	0.89	1.00	1.78	256	D_{shaft}
0	0	0.95	1.00	1.89	0	
0	0	0.95	1.00	1.89	0	
4	1	-	-	-	-	Btm 1 Shaft Dia
3	1	-	-	-	-	
3	1	-	-	-	-	
Σ = 125	35				482	

Ultimate Uplift Resistance

$$P_{dead\ wt} = P_{conc} + P_{soil} = 160 \text{ kip}$$
$$P_f = 0.7\pi D_{shaft} \sum_i \left(f_s \Delta z_{layer}\right)_i = 337 \text{ kip}$$
$$P_{uplift} = P_{dead\ wt} + P_f = 497 \text{ kip}$$

Reese and O'Neill (1988) - AASHTO *Standard Specifications for Highway Bridges*, 17th Ed, 2002 (Article 4.6.5.1)



Aschenbrener and Olson (1984) - ITL TR-005: *Theoretical Manual for Pile Foundations*, USACE ERDC, November 2000

Side Resistance in Cohesive Soil

$$Q_s = \pi B \sum \alpha_i S_{ui} \Delta z_i$$
$$\alpha_i = \alpha_p \alpha_l$$

Side Resistance in Cohesionless Soil

$$Q_s = \pi B \sum \sigma'_{zi} \beta_i \Delta z_i$$
$$\beta_i = 1.5 - 0.135\sqrt{z_i} \qquad 1.2 > \beta_i > 0.25$$

EFFECTIVE STRESS

Dead Wt (kip) Soil, P_{soil}	Dead Wt (kip) Conc, P_{conc}	Eff Overburden, σ_z' Layer	Eff Overburden, σ_z' Midpoint	Load Trnsfr Factor, β	Side Resistance Unit, f_s (ksf)	Side Resistance Ult, P_f (kip)	
9	4	600	-	-	-	-	Top 5 ft
7	3	460	830	1.14	0.95	30	
18	7	1250	1685	0.99	1.68	132	
23	11	1565	3093	0.74	2.30	451	
17	8	1146	4448	0.52	2.29	330	D_{shaft}
0	0	0	5021	0.43	2.18	0	
0	0	0	5021	0.43	2.18	0	
2	1	149	5095	-	-	-	Btm 1 Shaft Dia
2	1	115	5227	-	-	-	
2	1	115	5342	-	-	-	
Σ = 80	35					942	

Ultimate Uplift Resistance

$$P_{dead\ wt} = P_{conc} + P_{soil} = 115 \text{ kip}$$
$$P_f = 0.7\pi D_{shaft} \sum_i \left(f_s \Delta z_{layer}\right)_i = 659 \text{ kip}$$
$$P_{uplift} = P_{dead\ wt} + P_f = 774 \text{ kip}$$

CTA Green Line Station
Chicago, IL
GEI Project: 1801815

The proposed Chicago Building Code recommends that to avoid shaft squeeze, the upper limit of the 'squeeze ratio' σ_v * R / S_u (reciprocal of the stability number) for a given shaft diameter should follow the relationship in the table below. The maximum value is limited to 8.0

Where
σ_v : Total Overburden Stress
S_u : Undrained Shear Strength
R : Shaft Radius

Caisson Squeeze Potential Criteria

Depth / R	σ_v / S_u
4	5
8	6
12	6.5
16	7
20	7.5
24	8
28	8
32	8

Shaft Diameter	**2.5**	ft
Shaft Radius	**1.25**	ft
Site elev:	**17**	CCD
Avg γ	**125**	pcf

Depth (ft)	Elevation (CCD)	Total Overburden (psf)	Su (psf)	Depth/R Ratio	Limiting Value Required to Avoid Squeeze (from above table)	Total Overburden/Su	Will Squeeze Occur
13	4	1625	1300	10.4	6.3	1.3	No
15	2	1875	1300	12.0	6.5	1.4	No
17	0	2125	700	13.6	6.7	3.0	No
19	-2	2375	700	15.2	6.9	3.4	No
21	-4	2625	700	16.8	7.1	3.8	No
23	-6	2875	700	18.4	7.3	4.1	No
25	-8	3125	700	20.0	7.5	4.5	No
27	-10	3375	700	21.6	7.7	4.8	No
29	-12	3625	700	23.2	7.9	5.2	No
31	-14	3875	700	24.8	8.0	5.5	No
33	-16	4125	700	26.4	8.0	5.9	No
35	-18	4375	700	28.0	8.0	6.3	No
37	-20	4625	1500	29.6	8.0	3.1	No
39	-22	4875	1500	31.2	8.0	3.3	No
41	-24	5125	1500	32.8	8.0	3.4	No
43	-26	5375	1500	34.4	8.0	3.6	No
45	-28	5625	1500	36.0	8.0	3.8	No
47	-30	5875	1500	37.6	8.0	3.9	No
49	-32	6125	1500	39.2	8.0	4.1	No
51	-34	6375	1500	40.8	8.0	4.3	No
53	-36	6625	1500	42.4	8.0	4.4	No
55	-38	6875	1500	44.0	8.0	4.6	No
57	-40	7125	1500	45.6	8.0	4.8	No
59	-42	7375	1500	47.2	8.0	4.9	No
61	-44	7625	2000	48.8	8.0	3.8	No
63	-46	7875	2000	50.4	8.0	3.9	No
65	-48	8125	2000	52.0	8.0	4.1	No
67	-50	8375	2000	53.6	8.0	4.2	No
69	-52	8625	2000	55.2	8.0	4.3	No
71	-54	8875	2000	56.8	8.0	4.4	No
73	-56	9125	2000	58.4	8.0	4.6	No

CTA Green Line Station
Chicago, IL
GEI Project: 1801815

The proposed Chicago Building Code recommends that to avoid shaft squeeze, the upper limit of the 'squeeze ratio' $\sigma_v * R / S_u$ (reciprocal of the stability number) for a given shaft diameter should follow the relationship in the table below. The maximum value is limited to 8.0

Where
σ_v : Total Overburden Stress
S_u : Undrained Shear Strength
R : Shaft Radius

Caisson Squeeze Potential Criteria

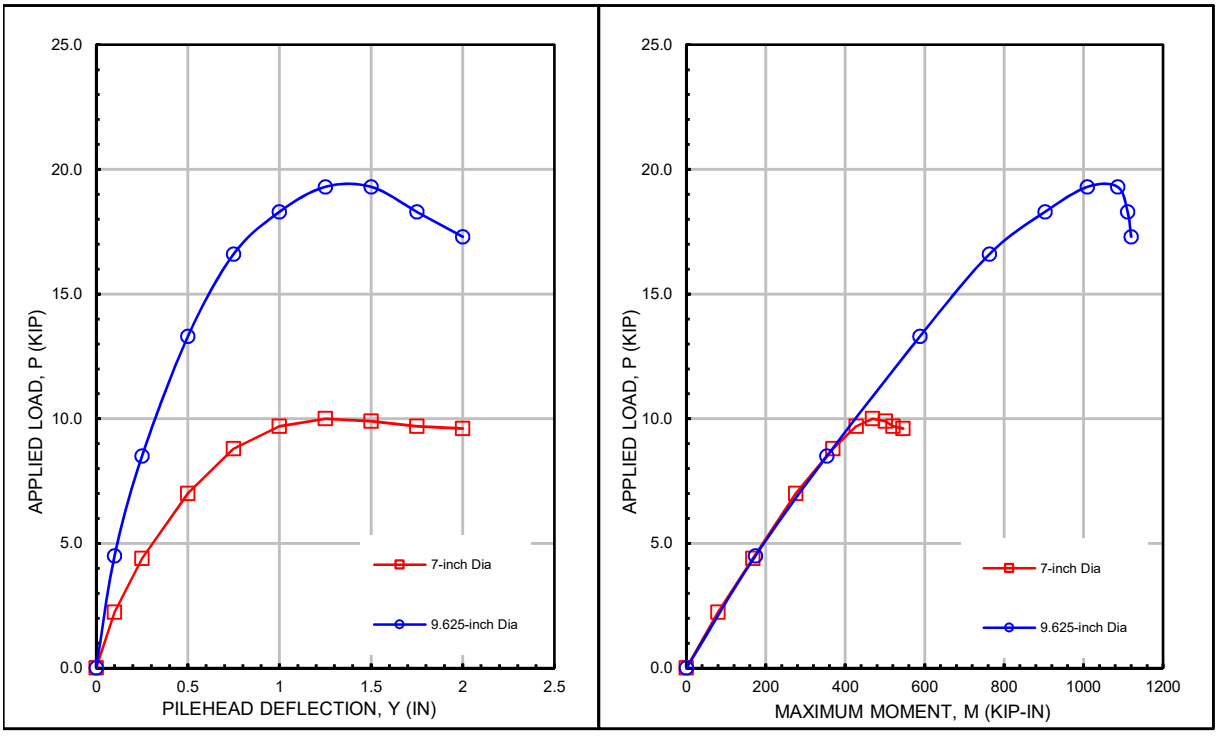
Depth / R	σ_v / S_u
4	5
8	6
12	6.5
16	7
20	7.5
24	8
28	8
32	8

Shaft Diameter	5	ft
Shaft Radius	2.5	ft
Site elev:	17	CCD
Avg γ	125	pcf

Depth (ft)	Elevation (CCD)	Total Overburden (psf)	Su (psf)	Depth/R Ratio	Limiting Value Required to Avoid Squeeze (from above table)	Total Overburden/Su	Will Squeeze Occur
13	4	1625	1300	5.2	5.3	1.3	No
15	2	1875	1300	6.0	5.5	1.4	No
17	0	2125	700	6.8	5.7	3.0	No
19	-2	2375	700	7.6	5.9	3.4	No
21	-4	2625	700	8.4	6.1	3.8	No
23	-6	2875	700	9.2	6.2	4.1	No
25	-8	3125	700	10.0	6.3	4.5	No
27	-10	3375	700	10.8	6.4	4.8	No
29	-12	3625	700	11.6	6.5	5.2	No
31	-14	3875	700	12.4	6.6	5.5	No
33	-16	4125	700	13.2	6.7	5.9	No
35	-18	4375	700	14.0	6.8	6.3	No
37	-20	4625	1500	14.8	6.9	3.1	No
39	-22	4875	1500	15.6	7.0	3.3	No
41	-24	5125	1500	16.4	7.1	3.4	No
43	-26	5375	1500	17.2	7.2	3.6	No
45	-28	5625	1500	18.0	7.3	3.8	No
47	-30	5875	1500	18.8	7.4	3.9	No
49	-32	6125	1500	19.6	7.5	4.1	No
51	-34	6375	1500	20.4	7.6	4.3	No
53	-36	6625	1500	21.2	7.7	4.4	No
55	-38	6875	1500	22.0	7.8	4.6	No
57	-40	7125	1500	22.8	7.9	4.8	No
59	-42	7375	1500	23.6	8.0	4.9	No
61	-44	7625	2000	24.4	8.0	3.8	No
63	-46	7875	2000	25.2	8.0	3.9	No
65	-48	8125	2000	26.0	8.0	4.1	No
67	-50	8375	2000	26.8	8.0	4.2	No
69	-52	8625	2000	27.6	8.0	4.3	No
71	-54	8875	2000	28.4	8.0	4.4	No
73	-56	9125	2000	29.2	8.0	4.6	No

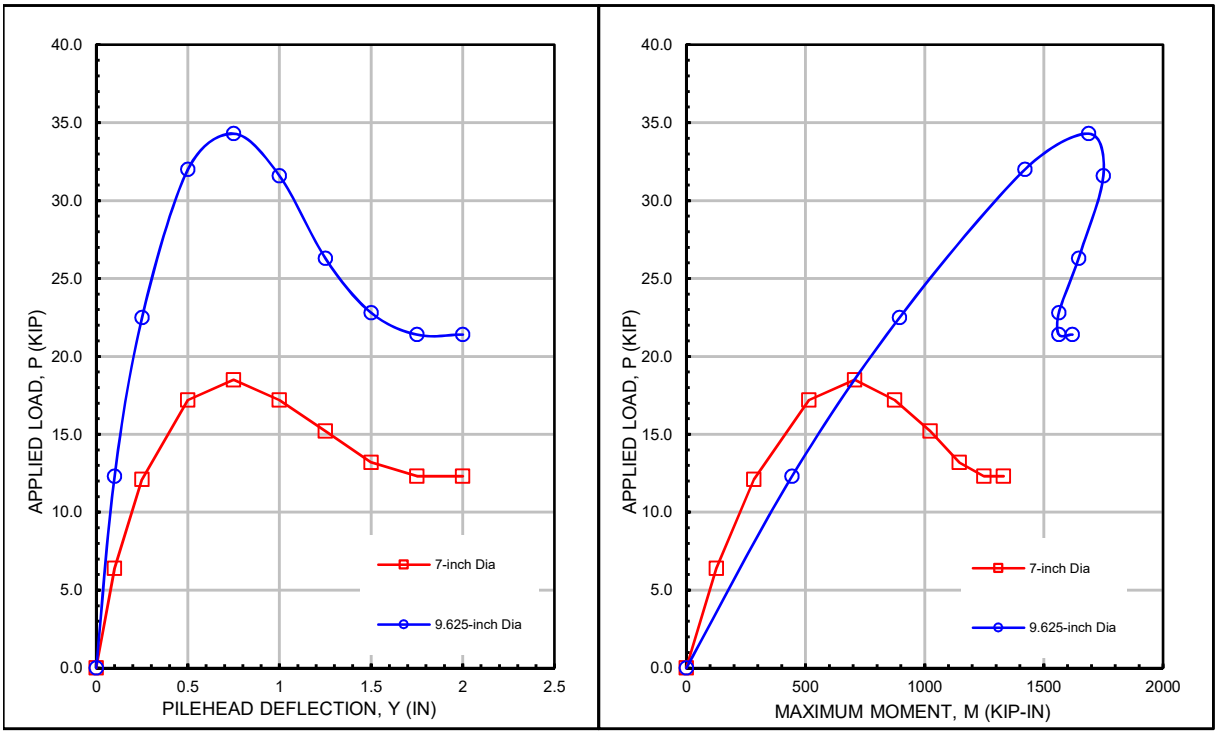
ORIGINATED BY: AF 7/11/2018
CHECKED BY: DSD 7/11/2018

LATERAL LOAD ANALYSIS - LPILE
Rock Socketed Micropile (Free Head)



	7-INCH DIAMETER		9.625-INCH DIAMETER	
DEFLECTION	SHEAR	MAX MOM	SHEAR	MAX MOM
0	0.0	0	0.0	0
0.1	2.2	80	4.5	174
0.25	4.4	168	8.5	354
0.5	7.0	276	13.3	588
0.75	8.8	369	16.6	763
1	9.7	428	18.3	903
1.25	10.0	469	19.3	1010
1.5	9.9	501	19.3	1086
1.75	9.7	521	18.3	1111
2	9.6	546	17.3	1120

LATERAL LOAD ANALYSIS - LPILE
Rock Socketed Micropile (Free Head)



	7-INCH DIAMETER		9.625-INCH DIAMETER	
DEFLECTION	SHEAR	MAX MOM	SHEAR	MAX MOM
0	0.0	0	0.0	0
0.1	6.4	127	12.3	443
0.25	12.1	283	22.5	895
0.5	17.2	514	32.0	1421
0.75	18.5	706	34.3	1688
1	17.2	874	31.6	1750
1.25	15.2	1024	26.3	1646
1.5	13.2	1146	22.8	1563
1.75	12.3	1249	21.4	1563
2	12.3	1331	21.4	1620

PRELIMINARY SITE INVESTIGATION

Damen Green Line Elevated CTA Station
Damen Avenue and Lake Street
Chicago, Illinois 60612

Prepared for

CDOT
CHICAGO DEPARTMENT OF TRANSPORTATION

Submitted to:

Perkins + Will
410 North Michigan Avenue, Suite 1600
Chicago, Illinois 60611

September 2018

GSG Project No.: 17-2047

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Perkins + Will
410 North Michigan Avenue, Suite 1600
Chicago, Illinois 60611

Prepared By: _____ *Date:* *September 21, 2018*

Emily McGonigle, E.I.T.
Civil Engineer

Reviewed By: _____ *Date:* *September 21 ,2018*

Ted Cagney, L.P.G.
Geologist

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EXECUTIVE SUMMARY

Perkins + Will (Client) retained GSG Consultants, Inc. (GSG), on behalf City of Chicago Department of Transportation (CDOT) to perform a Preliminary Site Investigation (PSI) to determine soil handling and management during the proposed construction of a new commuter railroad station for the Chicago Transit Authority's (CTA) Green Line on the corner of Damen Avenue and Lake Street, Chicago, 60612, hereinafter referred to as the "Site."

GSG performed a Preliminary Environmental Site Assessment (PESA) of the project area to identify any Potentially Impacted Properties (PIPs). The assessment included reviewing historic land use maps, reviewing a regulatory database, and performing a visual observations of the project area. The result of the PESA revealed the presence of 2 PIPs.

The purpose of the PSI was to characterize subsurface soils in order to determine soil handling and management, disposal options, and construction worker (CW) caution requirements. Soil boring locations were determined based on the PIP identified and location of proposed excavations. GSG performed the PSI field investigation activities on August 2, 2018. GSG advanced ten (10) borings and collected two (2) soil samples from each soil boring for environmental analytical testing. The first sample was collected at depths ranging between zero to five (0-5) feet below ground surface (bgs). The second sample was collected at depths ranging between five to twelve (5-12) feet bgs.

The samples were submitted to STAT Analysis for chemical analysis and selected soil samples were analyzed for Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), Polynuclear Aromatics (PNAs), Target Analyte List (TAL) Metals, Pesticides, Polychlorinated Biphenyls (PCBs), and pH.

GSG compared the soil analytical results to the Ingestion, Inhalation, and Soil Component of the Groundwater SROs for the Industrial/Commercial Property Use and Construction Worker SROs Scenarios provided in the to the Title 35 IAC Part 742 Illinois Environmental Protection Agency (IEPA) Tiered Approached to Corrective Action Objectives (TACO) Tier 1 Regulations. GSG also compared the soil analytical results to the Maximum Allowable Concentrations (MACs) in Title 35 of the Illinois Administrative Code 1100, Subpart F to determine if soils could be disposed of at CCDD or soil-only facilities. PNAs were compared to the Metropolitan area background values for CCDD disposal options.

Based on the analytical data, soil at eight (8) boring locations, B-1, B-2, B-3, B-4, B-7, B-8, B-9 and B-10, exceeded the TACO Tier 1 Industrial/Commercial SROs. GSG does not recommend reusing soils above the industrial/commercial SROs generated during construction activities. This type of soils should be disposed of at a licensed Subtitle D facility as solid waste.

Based on the analytical data, soil at nine (9) boring locations, B-1, B-2, B-3, B-5, B-6, B-7, B-8, B-9 and B-10, exceeded the CCDD/MAC Values. This soil may be reused onsite. However, this soil does not meet the requirements for disposal at a CCDD facility. If this soil is removed from the site, it must be disposed of at a licensed Subtitle D facility as solid waste.

Based on the analytical data, soil at nine (9) boring locations, B-1, B-2, B-3, B-4, B-6, B-7, B-8, B-9 and B-10, exceeded the Construction Worker ingestion exposure route. Construction Worker Precautions will be required during construction activities at these locations.

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1.0 INTRODUCTION

Perkins + Will (Client) retained GSG Consultants, Inc. (GSG), on behalf of City of Chicago Department of Transportation, to perform a Preliminary Site Investigation (PSI) to determine the soil reuse and soil handling and management procedures to be implemented during the proposed construction of a new commuter railroad station for the Chicago Transit Authority's (CTA) Green Line on the corner of Damen Avenue and Lake Street, Chicago, 60612, hereinafter referred to as the "Site." The Site is located on the southwest corner of the intersection of Damen Avenue and Lake Street with portions of the Site extending east and west along the train track on Lake Street.

Exhibit 1 shows the Site location on a 2018 United States Geological Survey (USGS) Chicago Loop, Illinois Quadrangle 7.5-minute series topographic map.

1.1 SITE BACKGROUND

GSG performed a Preliminary Environmental Site Assessment (PESA) in August 2018, the Target Property was first developed prior to 1938, and "as being occupied by elevated tracks running east-west through Lake Street, with an elevated station at the intersection of Lake Street and Damen Avenue. In the southwest corner of Lake Street and Damen Avenue is a multi-story building of undetermined use. The 1952 through 1984 Aerial photograph is similar to the 1938 photograph, with the exception that the only the multi-story building is present. Sometime between 1984 and 1988, the multi-story building was razed, leaving the site vacant until the current day.

"Available Sanborn Fire Insurance Maps for the year 1916 depicts the site as being occupied by Chicago and Oak Park Elevated tracks through the center of W. Lake Street, with an elevated station with a ticket office at the intersection of W. Lake Street and N. Robey. The portion of the site located at the southwest corner of the intersection of Robey and Lake is occupied by five (5) three-story commercial properties, a two-story mixed use commercial and residential property labeled "CARPR SHOP," a two-story office building, and a garage. On the 1950 and 1975 Sanborn Maps, N. Robey has been renamed N. Damen Avenue, the elevated station has been removed, and the office, the garage and the two-story mixed-use building have been razed, and the remainder of the site is vacant. The corner of Damen Avenue and Lake Street is a vacant lot from 1988 through 2004."

The PESA revealed Recognized Environmental Conditions (RECs) at the following adjacent properties:

- Standard Equipment Company – adjacent to the north: The property is a sales and service center for industrial vacuum equipment and a generator of Class D001 (ignitable) wastes.

- Henry Horner Homes – adjacent to the west: The property is registered in the Illinois Site Remediation Program (SRP). The site was enrolled in the SRP on January 7, 2008. A comprehensive No Further Remediation letter was issued for the site with Engineering Controls on August 10, 2010. The controls consisted of concrete and 3 feet of clean fill. A comprehensive No Further Remediation letter was issued for the site with Institutional Controls on August 10, 2010. The controls consisted of a residential or commercial land use restriction. A Comprehensive No Further Remediation Letter was issued for the entire site on February 15, 2017.

1.2 OBJECTIVES AND REPORT ORGANIZATION

The purpose of the PSI was to determine the absence or presence of soil above Illinois Environmental Protection Agency (IEPA) Tiered Approach to Corrective Action Objectives (TACO) Tier 1 Soil Remediation Objectives (SROs) and the Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MACs) for reuse and disposal parameters.

The PSI report has been organized into the following sections:

- **Section 1.0 – Introduction**

  This section presents a brief description of the Site location, Recognized Environmental Conditions, and Site area geological and hydrological characteristics.

- **Section 2.0 – Field Investigation**

  This section describes the activities associated with the Site investigation and field observations.

- **Section 3.0 – Analytical Results Evaluation**

  This section provides a summary of analytical results, an evaluation and interpretation of the data obtained, and an analysis of applicable regulatory requirements.

- **Section 4.0 – Summary and Conclusions**

  This section presents a summary of the Site conditions and findings and indicates the types of soils found onsite.

- **Section 5.0 – Recommendations**

  This section presents relevant findings and recommendations for further actions.

1.3 GEOLOGY AND HYDROGEOLOGY

The topography, geology and hydrogeology of the region and Site are presented in the following sections.

1.3.1 Regional Geology

According to the "Geologic Map of Illinois" (1:500,000; Kolata 2005) bedrock in the project area consists of Silurian dolomite. GSG reviewed several published documents in an effort to determine the regional geological setting in the area of the project area. The bedrock in the Chicago area is overlain by glacial drift that was deposited by Pleistocene glaciers that repeatedly covered the area and by the various high-level states of Lake Michigan. The Pleistocene strata which underlies the study area, as inferred from the "Surficial Geology of the Chicago Region" (Willman and Lineback, ISGS, 1970), consists of the Carmi Member of the Equality Formation. The Carmi Member consists of "largely quiet-water lake sediment; dominantly well bedded silt, locally laminated and containing thin beds of clay; local lenses of sand and sandy gravel along beaches."

Overlying the Pleistocene deposits are surficial soil deposits which according to the General Soil Map of DuPage and Part of Cook Counties, Illinois, (US Dept. of Agriculture, 1979), consist of Urban Land- Milford association soils. These are "built-up areas and deep, nearly level, poorly drained soils that have a silty and clayey subsoil; formed in glacial lake sediment".

According to the "Potential for Contamination of Shallow Aquifers in Illinois," (Richard C. Berg, John P. Kempton, ISGS, 1984), the project area is located within the E rating area. The geologic materials in the E rating area consist of "uniform, relatively impermeable silty or clayey till or other fine-grained materials more than 50 feet thick; no sand and gravel identified." The potential for contamination is "low" because of low hydraulic conductivity, 1×10^{-9} to 1×10^{-7} cm/sec and good attenuation capacities.

Based on the "Potential for Contamination of Shallow Aquifers by Surface and Near-Surface Waste Disposal" Plate, the Site is located within the D2 rating area. The geologic materials in the D2 rating area consist of "uniform, relatively impermeable silty or clayey till or other fine-grained materials more than 20 feet thick; no sand and gravel identified." The potential for contamination is "low" because of low hydraulic conductivity, 1×10^{-9} to 1×10^{-7} cm/sec and good attenuation capacities.

1.3.2 Site Geology

The 2012 USGS 7.5-minute Chicago Loop Quadrangle show the project area to be generally flat, gently sloping from west to east. On average, the project area is approximately 597 feet above sea level.

No surface bodies of water are present onsite. The closest surface water body to the Site is the Chicago River, which is approximately 2 miles east of the Site. Urban infrastructure, including paved sidewalks, streets and parking lots, building structures and sewer systems, predominantly control local surface water flow.

1.3.3 Regional Hydrogeology

The Summary of the Geology of the Chicago Area (Willman 1971) describes shallow groundwater in the Chicago area as being limited to sand and gravel horizons in unconsolidated soil and fractured bedrock aquifers. The unconsolidated materials in this area consist primarily of clay with isolated lenses of sand material and are not considered aquifers. In the Chicago area, bedrock aquifers are found within Silurian, Ordovician and Cambrian formations, which are greater than 50 feet bgs.

GSG reviewed published geologic information to develop an understanding of site geology and anticipated groundwater flow direction. Groundwater flow can be locally impacted by utilities, wells, or other man-induced changes, but generally corresponds with surface topography. The 2018 USGS 7.5-minute Chicago Loop Quadrangle shows the project area to be sloping gently from west to east, generally toward Lake Michigan.

2.0 FIELD INVESTIGATION

GSG advanced ten (10) borings and collected two (2) soil samples from each soil boring for environmental analytical testing. The first sample was collected at depths ranging between zero to five (0-5) feet below ground surface (bgs). The second sample was collected at depths ranging between five to twelve (5-12) feet bgs.

The boring locations and analysis were chosen based on the proposed construction work and the RECs identified at each location.

Exhibit 2 shows the locations of the soil borings completed during this investigation at the Site.

2.1 SOIL SAMPLE COLLECTION

GSG conducted environmental sampling at ten (10) boring locations. A total of 20 soil samples were collected during the field investigation activities. Soil Boring Logs can be found in **Appendix A**. The soil borings were performed using a direct-push probing device (Geoprobe® 7822TM). The soil samples were collected using the DualTube 22 (DT22) soil sampling system. The DT22 system collected continuous core samples of unconsolidated materials from within a sealed casing. Samples were collected and retrieved within an acetate liner that is threaded onto the leading end of the rod string minimizing any potential cross contamination from the equipment. The DT22 system eliminates the need to collect equipment blank samples.

GSG's field representative inspected each soil sample for the presence of soil staining and/or olfactory impacts. The samples were collected from each boring based one field observation ad screening. In general, one (1) soil sample was collected from the top fill materials, and one (1) soil sample from the native natural materials present beneath the fill materials. Soil samples were screened using a calibrated photoionization detector (PID) for the presence of volatile organic compounds (VOCs) using the headspace procedure. VOCs were not detected above ambient levels during PID screening. No odors and staining were observed.

Soil samples analyzed for volatile constituents were collected immediately after sample retrieval in accordance with SW-846 Method 5035 using the following Encore™ sampling procedures:

- An Encore™ was inserted into the Encore T-Handle™.
- The Encore™ was then pushed into a freshly exposed surface of soil until the syringe was full.

- The Encore™ was then removed from the handle and a cap was placed over it to secure the contents.
- The Encore™ was placed back in the provided package. The package was sealed and placed in a cooler with ice.

Soil samples to be analyzed for SVOCs/PNAs and RCRA Metals were collected after collecting the VOC samples. Soil was taken directly from the stainless steel tube and placed in clean sampling jars with Teflon lined lids. All soil samples were labeled and designated with a unique identifier, indicating the boring number and whether they were collected from the fill or native material. The jar lids were secured and placed in a cooler packed with ice. Soil samples were transported to the analytical laboratory on the same day of collection and received by the subcontracted laboratory under standard chain-of-custody procedures. GSG submitted the upper soil samples for analysis, and placed the lower samples on hold, pending the results of the upper samples. The signed chain-of-custody form is included in **Appendix B**.

2.2 SUBSURFACE SOIL CONDITIONS

Borings B-1 through B-5 were completed in the sidewalks, at the approximate locations of the proposed stairways to the elevated platform. Borings B-6 through B-10 were completed at the location for the proposed ground-level station.

The near surface material in borings B-1 through B-5 was 6 inches of concrete. Underlying this material was gravel base course to a depth of between 2 and 3 feet bsg. Underlying the gravel in B-1, to a depth of approximately 10 feet bsg, was fill material consisting of dark brown and black sand with trace gravel. Underlying this material, to a depth of approximately 11.5 feet bsg, was fill material consisting of gravel. Underlying this material, to the boring termination at approximately 12 feet bsg, was native material consisting of gray silty clay with trace amounts of gravel.

Underlying the gravel in B-2 was fill material, to a depth of approximately 5 feet bsg, consisting of dark brown and black silty sand with trace gravel. Underlying this material, to a depth of approximately 10 feet bsg, was native material consisting of brown silty sand with trace amounts of gravel. Underlying this material, to the boring termination at approximately 12 feet bsg, was native material consisting of gray silty clay with trace amounts of gravel.

Underlying the gravel in B-3 was fill material, to a depth of approximately 8 feet bsg, consisting of dark brown and black silty sand with trace gravel. Underlying this material, to a depth of approximately 10 feet bsg, was fill material consisting of brown and gray silty clay with trace amounts of gravel. Underlying this material, to the boring termination at approximately 12 feet bsg, was native material consisting of gray silty clay with trace amounts of gravel.

Underlying the gravel in B-4 was fill material, to a depth of approximately 4 feet bsg, consisting of black sand with trace gravel. Underlying this material was fill material, to a depth of approximately 10 feet bsg, consisting of dark brown sand with trace gravel. Underlying this material, to the boring termination at approximately 12 feet bsg, was native material consisting of brown sand.

Underlying the gravel in B-5 was fill material, to a depth of approximately 10 feet bsg, consisting of brown and gray sand with trace gravel. Underlying this material, to the boring termination at approximately 12 feet bsg, was native material consisting of brown sand.

The near surface material in brings B-6 through B-10 consisted of between 2 and 3 inches of gravel. Underlying the near surface material in B-6 was fill material, to a depth of approximately 5 feet bsg, consisting of dark brown and black silty sand, with trace amounts of gravel and organics. Underlying this material was fill material, to a depth of approximately 8 feet bsg, consisting of brown sand with trace brick fragments. Underlying this material was fill material, to a depth of approximately 9 feet bsg, consisting of brown and gray silty clay with trace gravel. Underlying this material, to the boring termination at approximately 12 feet bsg, was native material consisting of gray silty clay with trace amounts of gravel.

Underlying the near surface material in B-7 was fill material, to a depth of approximately 4 feet bsg, consisting of brown silty sand with trace amounts of gravel. Underlying this material was fill material, to a depth of approximately 5 feet bsg, consisting of gravel. Underlying this material was fill material, to a depth of approximately 8 feet bsg, consisting of brown and gray silty sand with trace wood fragments. Underlying this material was fill material, to a depth of approximately 9.5 feet bsg, consisting of gravel and brick fragments. Underlying this material, to the boring termination at approximately 12 feet bsg, was native material consisting of brown and gray silty clay with trace amounts of gravel.

Underlying the near surface material in B-8 was fill material, to a depth of approximately 3 feet bsg, consisting of dark brown and black silty clay with trace gravel. Underlying this material was fill material, to a depth of approximately 4 feet bsg, consisting of gravel. Underlying this material was fill material, to a depth of approximately 6.5 feet bsg, consisting of dark brown and black silty clay with trace brick and wood fragments. Underlying this material was fill material, to a depth of approximately 7.5 feet bsg, consisting of brown silty clay with trace amounts of gravel. Underlying this material, to the boring termination at approximately 12 feet bsg, was native material consisting of gray silty clay with trace amounts of sand and gravel.

Underlying the near surface material in B-9 was fill material, to a depth of approximately 5 feet bsg, consisting of dark brown and black silty clay with trace gravel. Underlying this material was native material, to a depth of approximately 7.5 feet bsg, consisting of brown sand with trace amounts of gravel. Underlying this material, to the boring termination at approximately 12 feet bsg, was native material consisting of gray silty clay with trace amounts of sand and gravel.

Underlying the near surface material in B-10 was fill material, to a depth of approximately 3.5 feet bsg, consisting of dark brown and black silty sand with trace gravel. Underlying this material was fill material, to a depth of approximately 7 feet bsg, consisting of dark brown sand with trace amounts wood and brick fragments and trace amounts of gravel. Underlying this material was native material, to a depth of approximately 9 feet bsg, consisting of brown sand with trace amounts of gravel. Underlying this material, to the boring termination at approximately 12 feet bsg, was native material consisting of gray silty clay with trace amounts of sand and gravel.

3.0 ANALYTICAL RESULTS EVALUATION

GSG evaluated the soil analytical results with respect to TACO Tier 1 Soil Remediation Objectives (SROs) for Industrial/Commercial properties and construction worker precautions for reuse and disposal parameters and CCDD MAC Values.

3.1 ANALYTICAL TESTING RESULTS

The analytical testing program was selected based on the PIP identified on the project corridor assessment and comprised of the following:

- Volatile Organic Compounds (VOCs): US EPA Method SW5035
- Semi Volatile Organic Compounds (SVOCs) and Polynuclear Aromatic Hydrocarbons (PNAs): US EPA Method SW8270C
- Total Resource Conservation and Recovery Act (RCRA) Metals: US EPA Method SW6020A and SW7471B
- Target Analyte List (TAL) Metals: US EPA Method SW6020A and SW3050B
- Toxicity Characteristic Leaching Procedure (TCLP) Metals: US EPA Method SW6020A and SW6050B
- Synthetic Precipitation Leaching Procedure (SPLP) Metals: US EPA Method SW1312/6020A and SW3005A
- Pesticides: US EPA Method SW8081B and SW3550B
- Polychlorinated Byphenols (PCBs): US EPA Method SW8082A and SW3550B
- pH: US EPA Method SW9045C

The table below presents a summary of sampling and analysis completed as part of this investigation.

SUMMARY OF SAMPLING AND ANALYSIS PROGRAM

Boring ID	Sample ID	Sample Depth (feet)	VOCs	SVOCS	PNAs	TAL Metals	RCRA Metals	SPLP Iron	SPLP Selenium	SPLP Lead	SPLP Manganese	TCLP Lead	Pesticides	PCBs	pH
B-1	B-1-0305	3-5	X	X	X	X							X	X	X
	B-1-011012	11-12			X		X		X						X
B-2	B-2-0204	2-4			X		X								X
	B-2-010012	10-12			X		X								X
B-3	B-3-0305	3-5			X		X								X
	B-3-010012	10-12	X	X	X	X							X	X	X
B-4	B-4-0204	2-4			X		X								X
	B-4-010012	10-12			X		X								X
B-5	B-5-0305	3-5	X	X	X	X							X	X	X
	B-5-010012	10-12			X		X								X
B-6	B-6-0103	1-3			X		X			X					X
	B-6-09011	9-11	X	X	X	X		X			X		X	X	X
B-7	B-7-0103	1-3			X		X								X
	B-7-010012	10-12			X		X								X
B-8	B-8-0103	1-3	X	X	X	X		X		X			X	X	X
	B-8-08010	8-10			X		X								X
B-9	B-9-0103	1-3			X		X					X			X
	B-9-0507	5-7	X	X	X	X			X				X	X	X
B-10	B-10-0103	1-3			X		X								X
	B-10-0709	7-9			X		X								X

The laboratory analytical results revealed the presence of several PNAs and inorganic heavy metal constituents in several soil samples collected form the site. A complete Analytical Results are provided in **Appendix B**.

3.2 ANALYTICAL DATA EVALUATION

The analytical data were compared to the Illinois Environmental Protection Agency (IEPA) Tiered Approach to Corrective Action Objectives (TACO) Tier 1 Soil Remediation Objectives (SROs) for Industrial/Commercial and Construction Worker to determine soil handling and construction worker precautions requirements. The analytical data were also compared to the Clean Construction of Demolition Debris (CCDD) Maximum Allowable Concentration (MAC) values in Title 35 of the Illinois

Administrative Code 1100, Subpart F to determine soil disposal options. PNAs were also compared to the Metropolitan area background values for CCDD disposal.

If constituents were detected above the Tier 1 SROs for Industrial/Commercial property, soil reuse is not recommended. If a constituent was detected above the Tier I SRO for CW, a construction worker precaution during the construction activities. Soils will be considered as "Uncontaminated soils", and could be disposed at a CCDD facility only if it the analytical data are below MAC values and has a soil pH between 6.25 and 9.00. The results of GSG's evaluation is presented in the following sections.

3.3 INDUSTRIAL/COMMERCIAL ROUTES

GSG compared the detected constituents to the Tier 1 Soil Remediation Objectives (SROs) of the Tiered Approach to Corrective Action Objectives (TACO) for the industrial/commercial ingestion and inhalation exposure routes. Table 1 presents the soil analytical results compared to the TACO Tier 1 Industrial/Commercial SROs with exceedances of applicable SRO values highlighted in red.

TACO TIER 1 INDUSTRIAL/COMMERCIAL SRO EXCEEDANCES

Boring ID	Sample ID	Depth (ft bgs)	Constituents	Results (mg/kg)	Industrial/Commercial SROs		SCGW SROs
					Ingestion	Inhalation	
B-1	B-1-0305	3-5	Benzo(a)pyrene	1.8	1.3	NC	8
			Lead [a]	220	800	NC	107
B-2	B-2-0204	2-4	Arsenic [a]	14	13	1200	32
B-3	B-3-0305	3-5	Benzo(a)anthracene	2.8	8	NC	2
			Benzo(a)pyrene	3.4	1.3	NC	8
			Dibenzo(a,h)anthracene	1.1	0.8	NC	2
	B-3-010012	10-12	Vinyl chloride	0.011	7.9	1.1	0.01
B-5	B-5-0305	3-5	Benzo(a)pyrene	1.4	1.3	NC	8
B-6	B-6-0103	1-3	Lead [a]	170	800	NC	107
			SPLP Lead	0.011	NC	NC	0.0075
B-7	B-7-0103	1-3	Benzo(a)anthracene	8.6	8	NC	2
			Benzo(a)pyrene	7.9	1.3	NC	8
			Benzo(b)fluoranthene	7.4	8	NC	5
			Dibenzo(a,h)anthracene	1.2	0.8	NC	2
			Chromium [a]	36	6100	420	28
			Lead [a]	330	800	NC	107
B-7	B-7-010012	10-12	Arsenic [a]	15	13	1200	32

Boring ID	Sample ID	Depth (ft bgs)	Constituents	Results (mg/kg)	Industrial/Commercial SROs		SCGW SROs
					Ingestion	Inhalation	
B-8	B-8-0103	1-3	Benzo(a)pyrene	1.8	1.3	NC	8
			Lead [a]	290	800	NC	107
			SPLP Lead	0.0096	NC	NC	0.0075
B-9	B-9-0103	1-3	Benzo(a)anthracene	4.1	8	NC	2
			Benzo(a)pyrene	3.9	1.3	NC	8
			Dibenzo(a,h)anthracene	1.1	0.8	NC	2
			Chromium [a]	32	6100	420	28
			Lead [a]	2200	800	NC	107
			TCLP Lead	0.82	NC	NC	0.0075
B-10	B-10-0103	1-3	Benzo(a)anthracene	7	8	NC	2
			Benzo(a)pyrene	6.1	1.3	NC	8
			Benzo(b)fluoranthene	5.8	8	NC	5
			Dibenzo(a,h)anthracene	1.7	0.8	NC	2
			Chromium [a]	31	6100	420	28
			Lead [a]	750	800	NC	107

[a]: pH specific SROs, 35 IAC 742, Appendix B, Table C

3.4 CLEAN CONSTRUCTION OR DEMOLITION DEBRIS EVALUATION

GSG compared the soil analytical results to the Maximum Allowable Concentrations (MACs), as presented in Title 35 of the Illinois Administrative Code 1100, Subpart F; dated August 30, 2012. Soil with values exceeding the MAC values, and/or exhibiting PID readings above background levels and/or exhibits pH values outside the IEPA-established range of values of 6.25 to 9.0, should be classified as non-CCDD material and should be disposed of at a Subtitle D landfill, if require removal form the site. PNAs were compared to the City of Chicago background values for CCDD disposal options.

Soil generated from the project area with constituents' concentration below the MAC values and within the pH range could be considered "Clean" and could be placed at a licensed CCDD facility. Soils with values exceeding the MAC values should be considered "Contaminated" and shall not be transported to a CCDD facility. Soil with pH value outside the allowable pH range and below the MAC values is considered clean, however, it cannot be disposed of at a CCDD facility.

Table 2 presents the soil analytical results compared to the CCDD MAC Values with exceedances of applicable MAC values highlighted in yellow. The table below summarizes the sample locations that exceeded the CCDD MAC Values for Metropolitan Statistical Area (MSA) Counties.

CCDD MAC VALUE EXCEEDANCES

Boring ID	Sample ID	Depth (ft bgs)	Constituents	Results (mg/kg)	CCDD MAC Value (mg/kg)	
					MSA County	City of Chicago
B-1	B-1-0305	3-5	Benzo(a)pyrene	1.8	2.1	1.3
			Dibenzo(a,h)anthracene	0.5	0.42	0.2
			Indeno(1,2,3-cd)pyrene	1	1.6	0.9
			Iron	21000	15900	15900
			Lead	220	107	107
	B-1-011012	11-12	Selenium	1.8	1.3	1.3
B-2	B-2-0204	2-4	Arsenic	14	13	13
B-3	B-3-0305	3-5	Benzo(a)anthracene	2.8	1.8	1.1
			Benzo(a)pyrene	3.4	2.1	1.3
			Benzo(b)fluoranthene	2.5	2.1	1.5
			Dibenzo(a,h)anthracene	1.1	0.42	0.2
			Indeno(1,2,3-cd)pyrene	1.8	1.6	0.9
	B-3-010012	10-12	Vinyl chloride	0.011	0.01	0.01
			Chromium	22	21	21
			Iron	26000	15900	15900
B-5	B-5-0305	3-5	Benzo(a)anthracene	1.5	1.8	1.1
			Benzo(a)pyrene	1.4	2.1	1.3
			Dibenzo(a,h)anthracene	0.44	0.42	0.2
			Iron	23000	15900	15900
			Lead	120	107	107
			Manganese	710	636	636
			pH	9.16	6.25-9.0	6.25-9.0
B-6	B-6-0103	1-3	Benzo(a)anthracene	1.3	1.8	1.1
			Dibenzo(a,h)anthracene	0.22	0.42	0.2
			Lead	170	107	107
	B-6-09011	9-11	Iron	30000	15900	15900
			Manganese	650	636	636

Boring ID	Sample ID	Depth (ft bgs)	Constituents	Results (mg/kg)	CCDD MAC Value (mg/kg)	
					MSA County	MSA County
B-7	B-7-0103	1-3	Benzo(a)anthracene	8.6	1.8	1.1
			Benzo(a)pyrene	7.9	2.1	1.3
			Benzo(b)fluoranthene	7.4	2.1	1.5
			Dibenzo(a,h)anthracene	1.2	0.42	0.2
			Indeno(1,2,3-cd)pyrene	3.6	1.6	0.9
			Chromium	36	21	21
			Lead	330	107	107
			Selenium	1.4	1.3	1.3
	B-7-010012	10-12	Arsenic	15	13	13
			Chromium	23	21	21
			Selenium	1.4	1.3	1.3
B-8	B-8-0103	1-3	Benzo(a)anthracene	1.8	1.8	1.1
			Benzo(a)pyrene	1.8	2.1	1.3
			Dibenzo(a,h)anthracene	0.35	0.42	0.2
			Indeno(1,2,3-cd)pyrene	0.97	1.6	0.9
			Iron	17000	15900	15900
			Lead	290	107	107
B-9	B-9-0103	1-3	Benzo(a)anthracene	4.1	1.8	1.1
			Benzo(a)pyrene	3.9	2.1	1.3
			Benzo(b)fluoranthene	3.4	2.1	1.5
			Dibenzo(a,h)anthracene	1.1	0.42	0.2
			Indeno(1,2,3-cd)pyrene	2.3	1.6	0.9
			Chromium	32	21	21
			Lead	2200	107	107
			Mercury	1.5	0.89	0.89
	B-9-0507	5-7	Selenium	1.7	1.3	1.3
B-10	B-10-0103	1-3	Benzo(a)anthracene	7	1.8	1.1
			Benzo(a)pyrene	6.1	2.1	1.3
			Benzo(b)fluoranthene	5.8	2.1	1.5
			Dibenzo(a,h)anthracene	1.7	0.42	0.2
			Indeno(1,2,3-cd)pyrene	3.6	1.6	0.9
			Chromium	31	21	21
			Lead	750	107	107
			Selenium	1.4	1.3	1.3

3.5 CONSTRUCTION WORKER EXPOSURE EVALUATION

GSG compared the detected constituents to the TACO Tier 1 SROs for construction workers to determine if there are special precautions are required during construction activities. **Table 3** presents the soil analytical results compared to the TACO Tier 1 Construction Worker SROs with exceedances of applicable SRO values highlighted in orange.

Table 3 presents the soil analytical results compared to the TACO Tier 1 Construction Worker SROs with exceedances of applicable SRO values highlighted in orange. The table below provides a list of constituents that exceeded the Tier 1 SROs for the Construction Worker Exposure Scenario.

TACO TIER 1 CONSTRUCTION WORKER EXCEEDANCES

Boring ID	Sample ID	Depth (ft bgs)	Constituents	Results (mg/kg)	Construction Worker SROs (mg/kg)	
					Ingestion	Inhalation
B-1	B-1-0305	3-5	Mercury	0.36	61	0.1
B-2	B-2-0204	2-4	Mercury	0.41	61	0.1
B-3	B-3-0305	3-5	Mercury	0.78	61	0.1
B-4	B-4-0204	2-4	Mercury	0.17	61	0.1
B-6	B-6-0103	1-3	Mercury	0.43	61	0.1
B-7	B-7-0103	1-3	Mercury	0.27	61	0.1
	B-7-010012	10-12	Mercury	0.57	61	0.1
B-8	B-8-0103	1-3	Mercury	0.47	61	0.1
B-9	B-9-0103	1-3	Lead	2200	700	NC
			Mercury	1.5	61	0.1
B-10	B-10-0103	1-3	Lead	750	700	NC
			Mercury	0.87	61	0.1

4.0 CONCLUSION AND RECOMMNEDATIONS

GSG Consultants, Inc. (GSG) completed a preliminary Site Investigation (PSI) in order to characterize the soils within the proposed commuter station property. The objectives of the PSI to determine soil handling and management, disposal options, and construction worker precaution requirements during construction activities.

Discussions regarding soil suitability for reuse in this report are based on environmental considerations only. The design engineer, and/or contractor, should refer to the project geotechnical reports for geotechnical considerations and recommendations

Based on the analytical data, soil at eight (8) boring locations, B-1, B-2, B-3, B-4, B-7, B-8, B-9 and B-10, exceeded the TACO Tier 1 Industrial/Commercial SROs. GSG recommends that soils exceeding the Industrial/Commercial SROs generated during the construction activities to be disposed of at a licensed Subtitle D facility as solid waste.

Based on the analytical data, soil at nine (9) boring locations, B-1, B-2, B-3, B-5, B-6, B-7, B-8, B-9 and B-10, exceeded the CCDD/MAC Values. This soil may be reused onsite. However, this soil does not meet the requirements for disposal at a CCDD facility. If this soil is removed from the site, it must be disposed of at a licensed Subtitle D facility as solid waste.

Based on the analytical data, soil at nine (9) boring locations, B-1, B-2, B-3, B-4, B-6, B-7, B-8, B-9 and B-10, exceeded the Construction Worker ingestion exposure route. Construction Worker Precautions will be required at these boring locations.

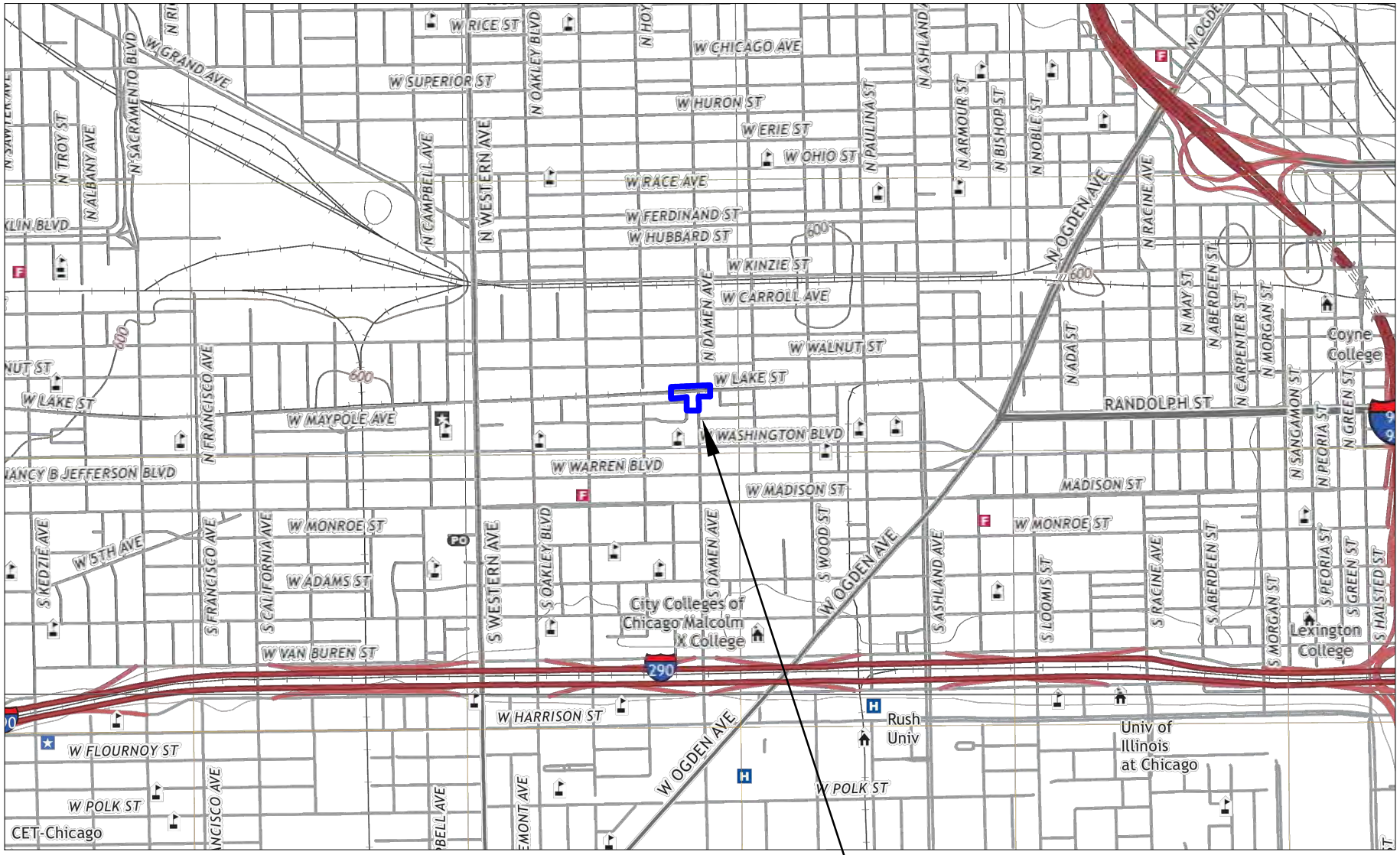
If evidence of soil contamination such as visual and/or olfactory are discovered in area not identified in this report, soil should be tested and evaluated in accordance acceptable procedures. GSG also recommends implementing soil containment and stormwater runoff control measures during construction to prevent the potential of contaminants migration from any impacted soils that are stockpiled within the project area. If soil must be stockpiled, GSG recommends storing soils in lined and covered roll-off boxes or segregated from other soils on storage pads designed to prevent migration of contaminants to clean areas.

Waste characterization will be required for the disposal of excess soils exceeding the MAC Values and require removal from the project area. Any soils that exhibit hazardous waste characteristics upon completion of waste characterization testing would require disposal at a Subtitle C landfill. GSG does not anticipate any soils would be classified as hazardous waste based on the available analytical data.

The conclusion and recommendations provided in the report are specific to the project described herein, and are based on the information obtained from the soil borings located within the project limits. The data evaluations performed in this report are based on subsurface conditions determined at the location of the borings. This report does not reflect all variations that may occur between boring locations or at some other time. If evidence of soil contamination, such as visual and/or olfactory, are discovered in area not identified in this report, soil should be tested and evaluated. Additionally, if elevated PID readings above ambient air background, the loads will be rejected, and the soil should be disposed at an approved Subtitle D landfill in accordance with all applicable regulations.

EXHIBITS

EXHIBIT 1	**Site Plan Map**
EXHIBIT 2	**Soil Boring Location Map**
EXHIBIT 3	**Soil Management Plan**
EXHIBIT 4	**Subsurface Cross-Sections**



REFERENCES: 2018 USGS CHICAGO LOOP, IL QUADRANGLE
2018 USGS ENGLEWOOD, IL QUADRANGLE

SITE

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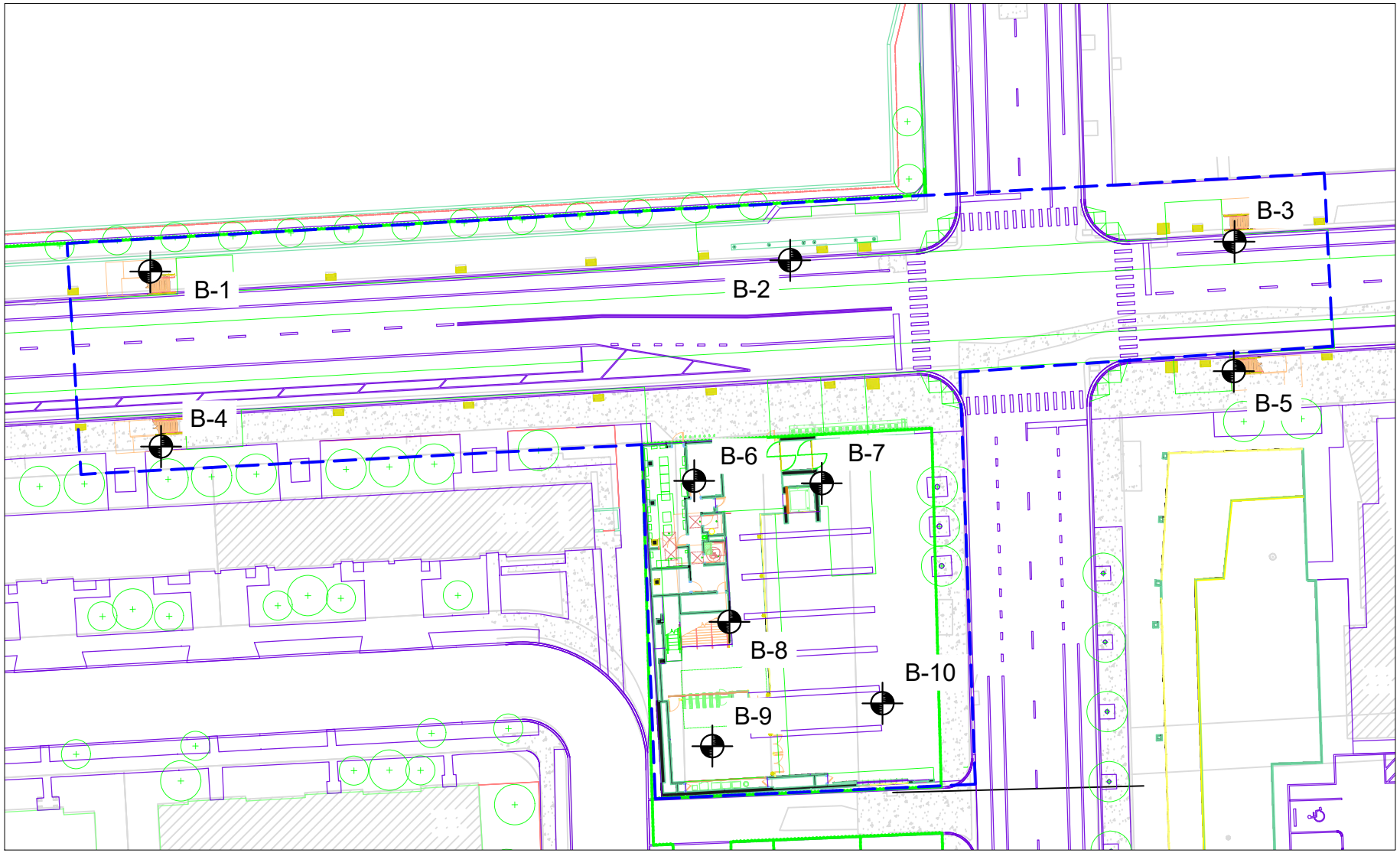
EXHIBIT 1 - SITE LOCATION MAP
PROPOSED DAMEN GREEN LINE ELEVATED STATION
CHICAGO, ILLINOIS 60612



SITE BOUNDARY

BORING LOCATIONS

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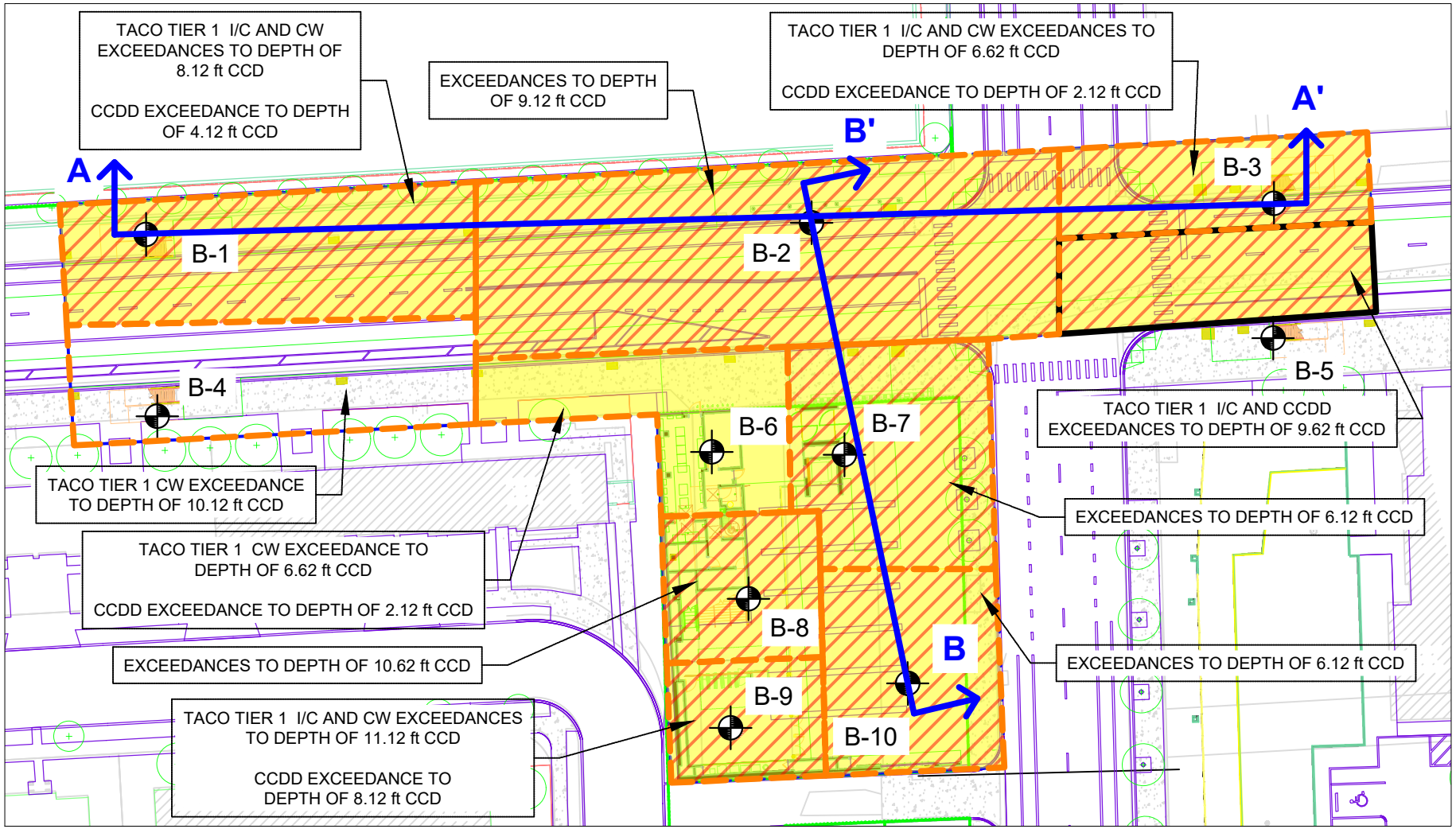
EXHIBIT 2 - BORING LOCATION MAP

PROPOSED DAMEN GREEN LINE ELEVATED STATION

CHICAGO, ILLINOIS 60612



SITE BOUNDARY

BORING LOCATIONS

CROSS SECTION

TACO TIER 1 I/C EXCEEDANCE

CCDD EXCEEDANCE

TACO TIER 1 CONSTRUCTION WORKER EXCEEDANCE

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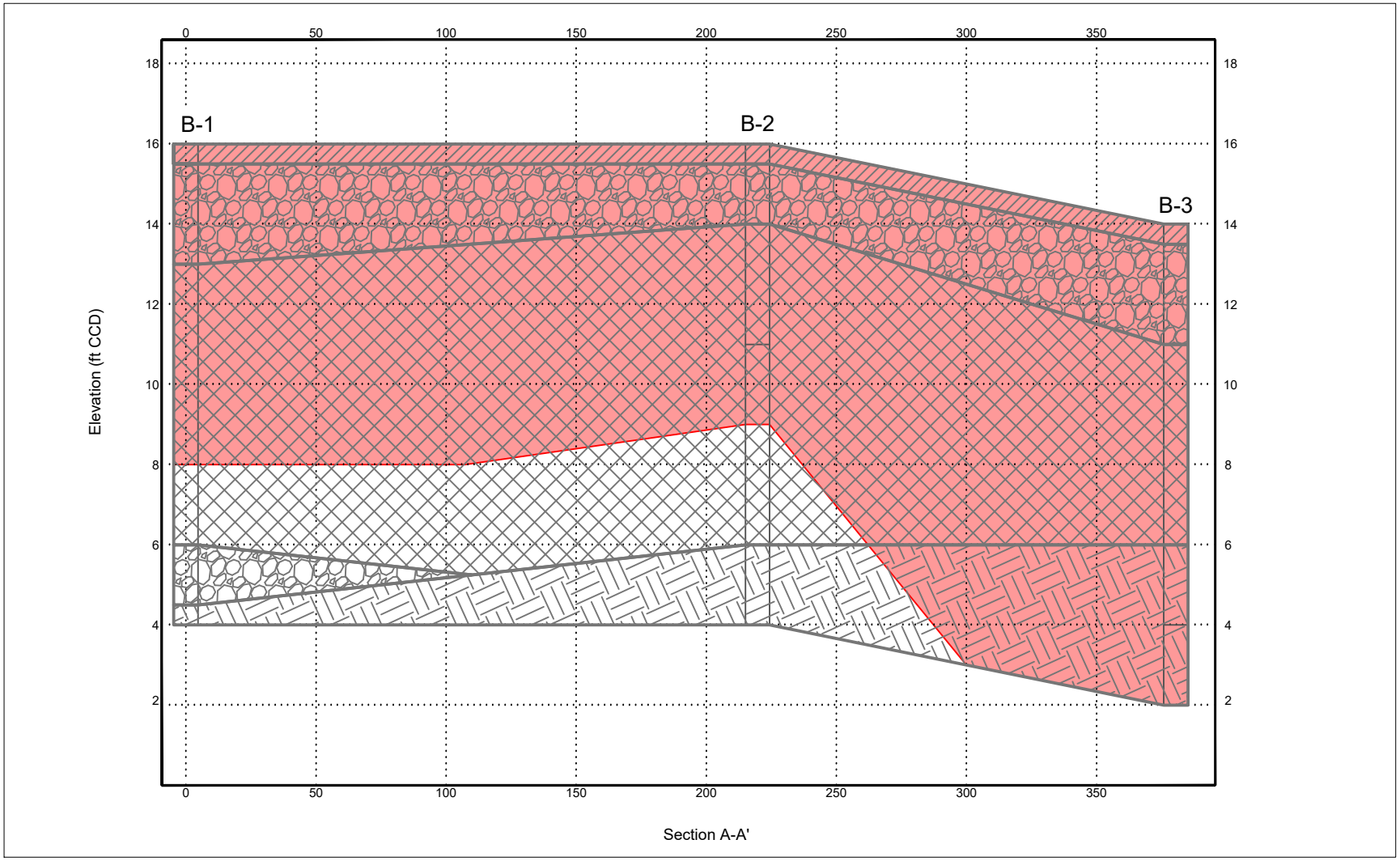
EXHIBIT 3 - SOIL MANAGEMENT PLAN

PROPOSED DAMEN GREEN LINE ELEVATED STATION

CHICAGO, ILLINOIS 60612



CONCRETE SIDEWALK

GRAVEL FILL

FILL MATERIAL

SAND

SILTY CLAY

TACO TIER 1 I/C EXCEEDANCES

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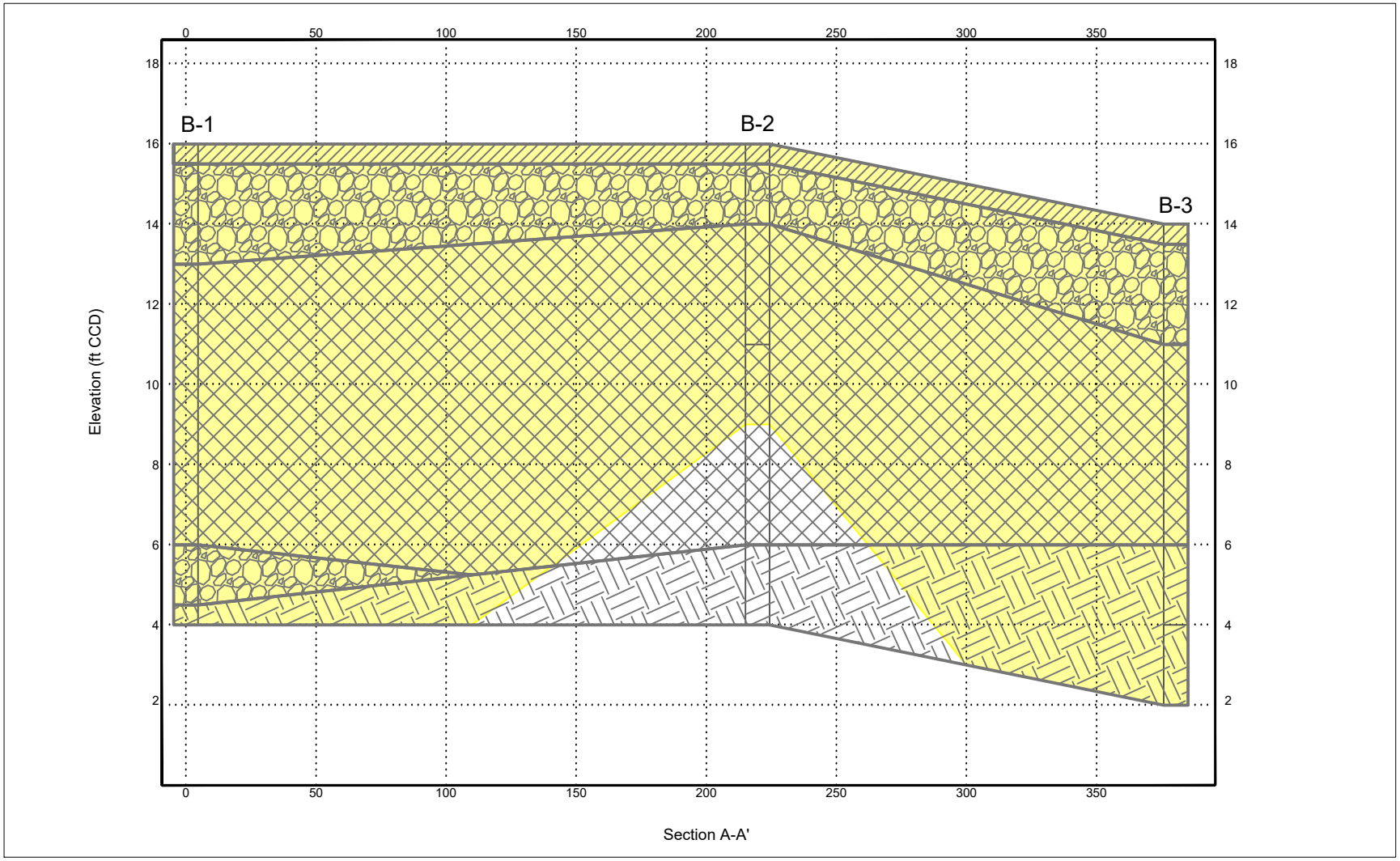
EXHIBIT 4A - CROSS-SECTION A-A'
TACO TIER 1 INDUSTRIAL/COMMERCIAL EXCEEDANCES
PROPOSED DAMEN GREEN LINE ELEVATED STATION
CHICAGO, ILLINOIS 60612



CONCRETE SIDEWALK

GRAVEL FILL

FILL MATERIAL

SAND

SILTY CLAY

CCDD EXCEEDANCES

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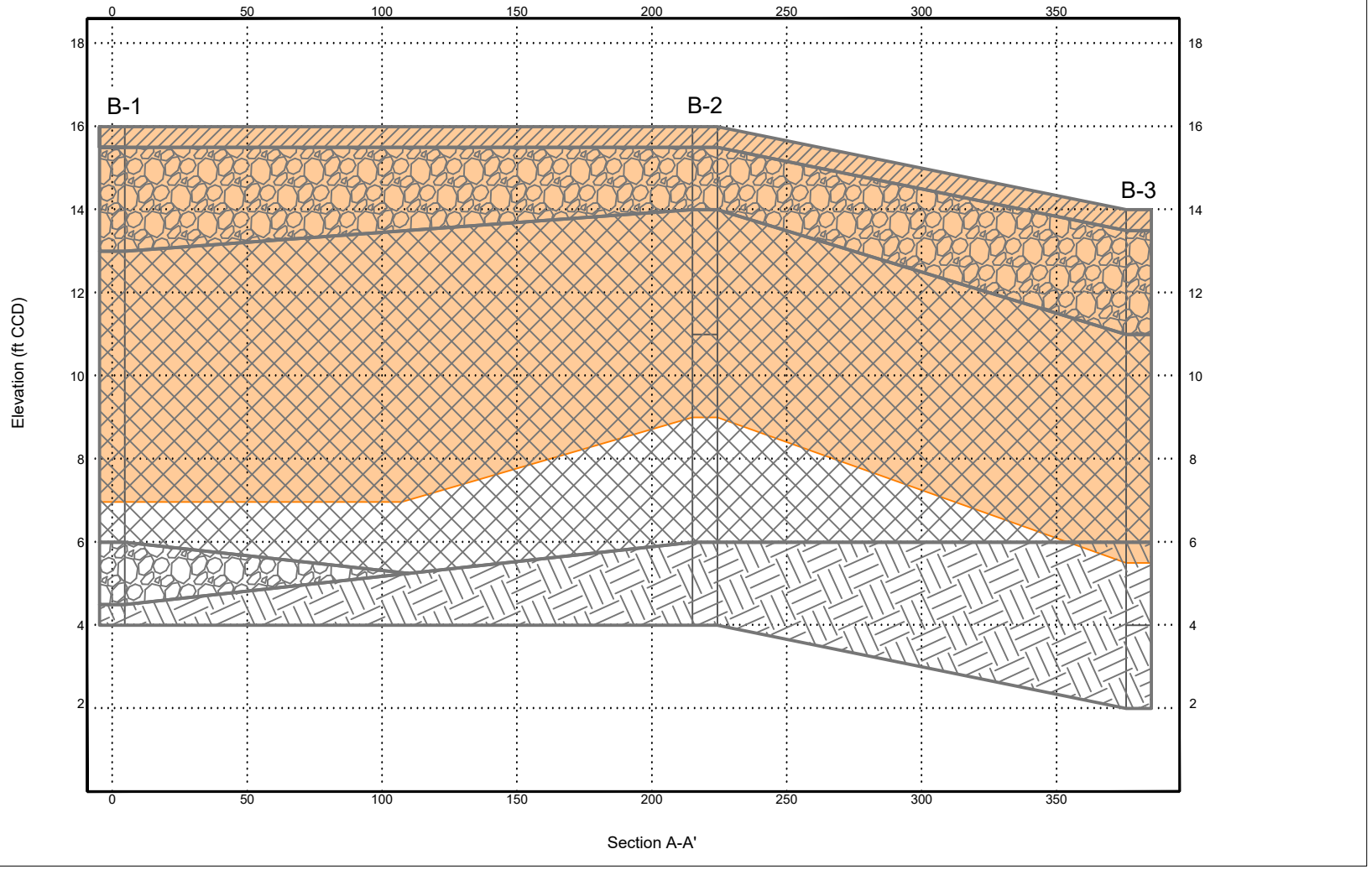
EXHIBIT 4B - CROSS-SECTION A-A'
CCDD EXCEEDANCES
PROPOSED DAMEN GREEN LINE ELEVATED STATION
CHICAGO, ILLINOIS 60612



CONCRETE SIDEWALK

GRAVEL FILL

FILL MATERIAL

SAND

SILTY CLAY

TACO TIER 1 CONSTRUCTION WORKER EXCEEDANCES

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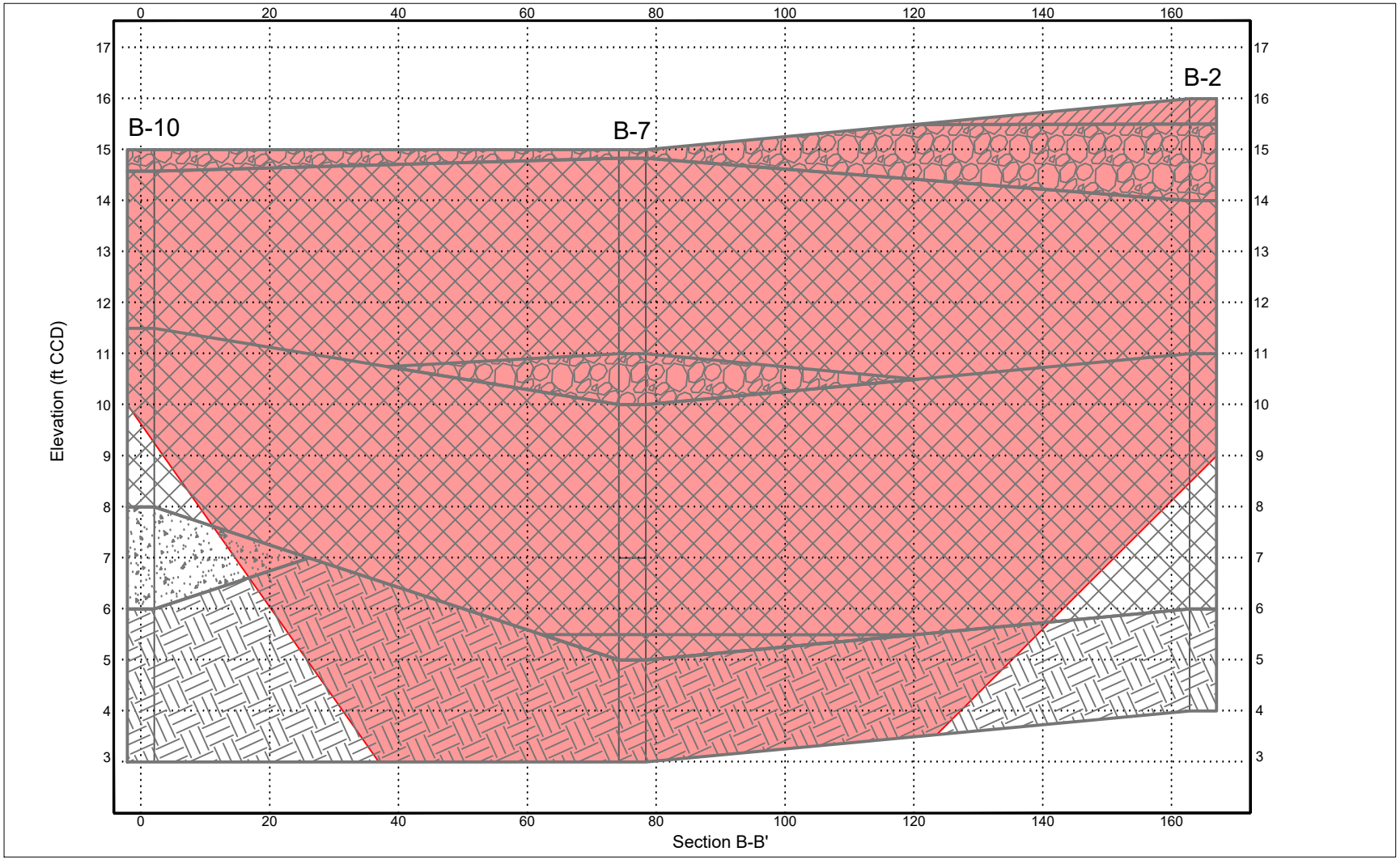
EXHIBIT 4C - CROSS-SECTION A-A'
TACO TIER 1 CONSTRUCTION WORKER EXCEEDANCES
PROPOSED DAMEN GREEN LINE ELEVATED STATION
CHICAGO, ILLINOIS 60612



CONCRETE SIDEWALK

GRAVEL FILL

FILL MATERIAL

SAND

SILTY CLAY

TACO TIER 1 I/C EXCEEDANCES

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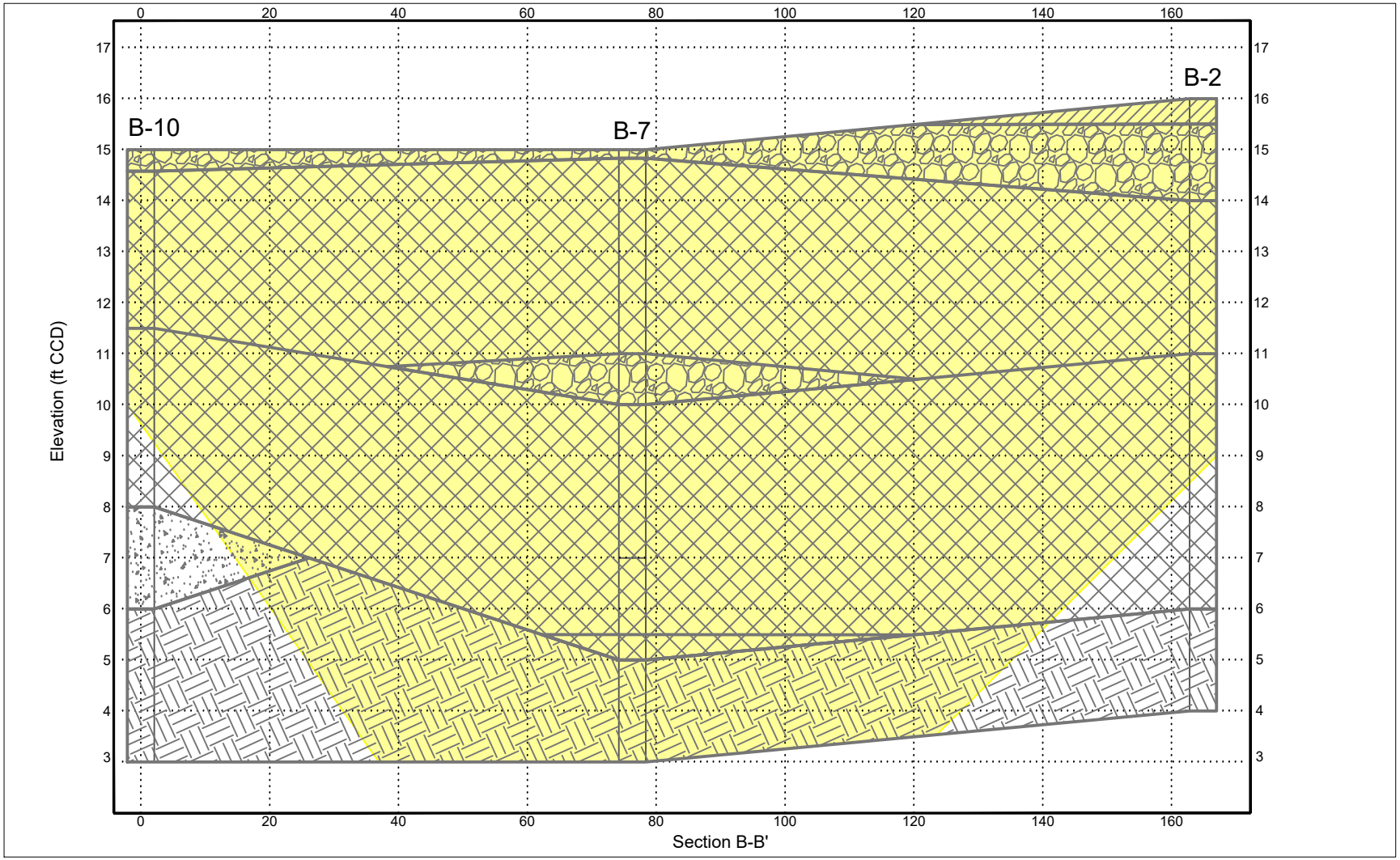
EXHIBIT 4D - CROSS-SECTION B-B'
TACO TIER 1 INDUSTRIAL/COMMERCIAL EXCEEDANCES
PROPOSED DAMEN GREEN LINE ELEVATED STATION
CHICAGO, ILLINOIS 60612



CONCRETE SIDEWALK

GRAVEL FILL

FILL MATERIAL

SAND

SILTY CLAY

CCDD EXCEEDANCES

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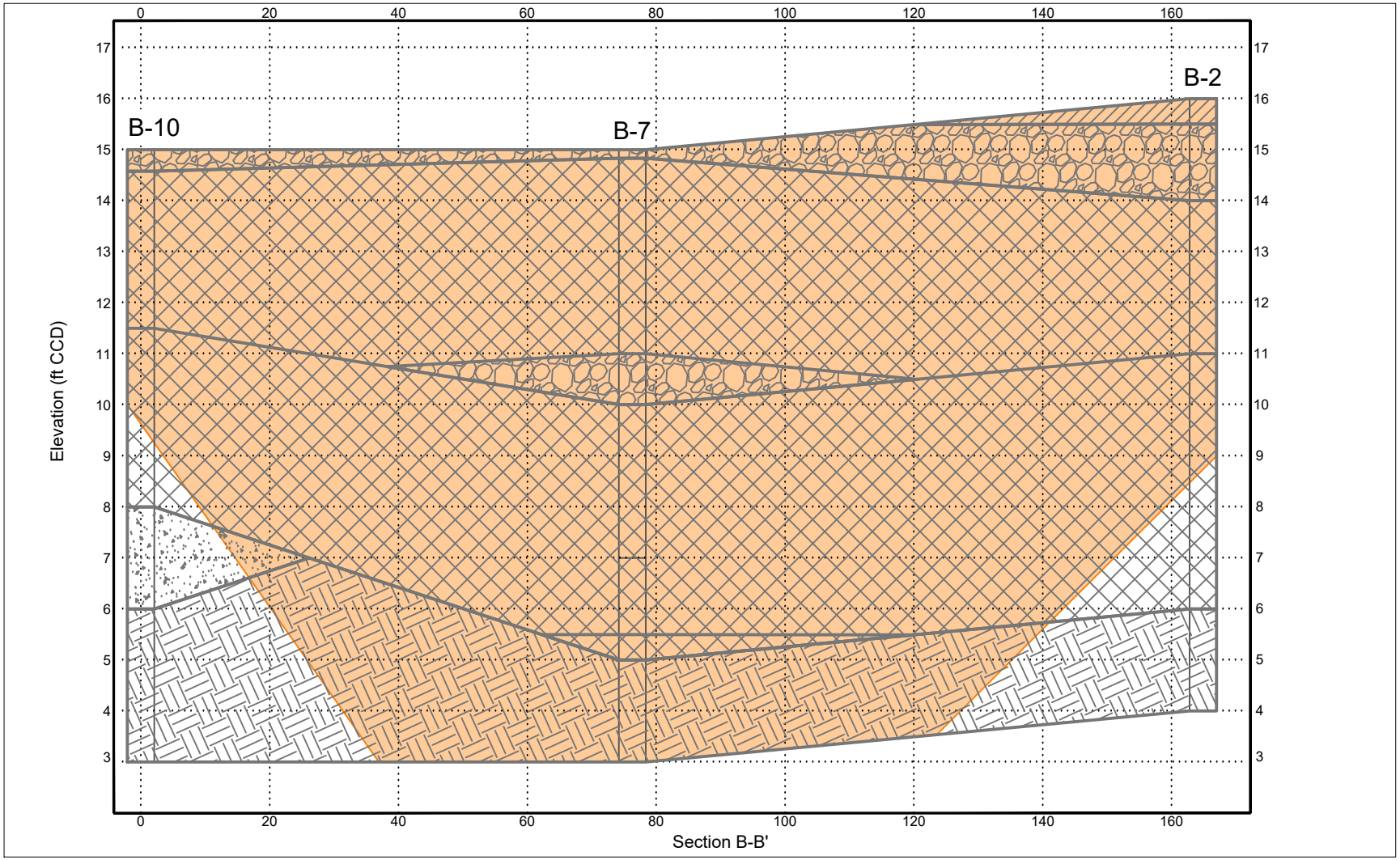
EXHIBIT 4E - CROSS-SECTION B-B'
CCDD EXCEEDANCES
PROPOSED DAMEN GREEN LINE ELEVATED STATION
CHICAGO, ILLINOIS 60612



CONCRETE SIDEWALK

GRAVEL FILL

FILL MATERIAL

SAND

SILTY CLAY

TACO TIER 1 CONSTRUCTION WORKER EXCEEDANCES

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EXHIBIT 4F - CROSS-SECTION B-B'
TACO TIER 1 CONSTRUCTION WORKER EXCEEDANCES
PROPOSED DAMEN GREEN LINE ELEVATED STATION
CHICAGO, ILLINOIS 60612

TABLES

TABLE 1 **Soil Analytical Results Compared to TACO Tier I Industrial/Commercial SROs**
TABLE 2 **Soil Analytical Results Compared to CCDD MAC Values**
TABLE 3 **Soil Analytical Results Compared to Construction Worker SROs**

TABLE 1

Soil Analytical Results Compared to TACO Tier I Industrial/Commercial SROs

TABLE # 1a
Soil Analytical Results
VOCs Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW	Sample	B-1-0305	B-3-010012	B-5-0305
				Date	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	*Class I*	**Depth (ft)**	3-5	10-12	3-5
VOCs							
Acetone	NC	100,000	25		< 0.12	< 0.073	< 0.13
Benzene	100	1.6	0.03		< 0.0077	< 0.0049	< 0.0088
Bromodichloromethane	92	3,000	0.6		< 0.0077	< 0.0049	< 0.0088
Bromoform	720	100	0.8		< 0.0077	< 0.0049	< 0.0088
Bromomethane	2,900	15	0.2		< 0.015	< 0.0098	< 0.018
2-Butanone	NC	NC	NC		< 0.12	< 0.073	< 0.13
Carbon disulfide	200,000	720	32		< 0.077	< 0.049	< 0.088
Carbon tetrachloride	44	0.64	0.07		< 0.0077	< 0.0049	< 0.0088
Chlorobenzene	41,000	210	1		< 0.0077	< 0.0049	< 0.0088
Chloroethane	NC	NC	NC		< 0.015	< 0.0098	< 0.018
Chloroform	940	0.54	0.6		< 0.0077	< 0.0049	< 0.0088
Chloromethane	NC	NC	NC		< 0.015	< 0.0098	< 0.018
Dibromochloromethane	41,000	1,300	0.4		< 0.0077	< 0.0049	< 0.0088
1,1-Dichloroethane	200,000	1,700	23		< 0.0077	< 0.0049	< 0.0088
1,2-Dichloroethane	63	0.7	0.02		< 0.0077	< 0.0049	< 0.0088
1,1-Dichloroethene	100,000	470	0.06		< 0.0077	< 0.0049	< 0.0088
cis-1,2-Dichloroethene	20,000	1,200	0.4		< 0.0077	< 0.0049	< 0.0088
trans-1,2-Dichloroethene	41,000	3,100	0.7		< 0.0077	< 0.0049	< 0.0088
1,2-Dichloropropane	84	23	0.03		< 0.0077	< 0.0049	< 0.0088
cis-1,3-Dichloropropene	57	2.1	0.004		< 0.0031	< 0.0020	< 0.0035
trans-1,3-Dichloropropene	57	2.1	0.004		< 0.0031	< 0.0020	< 0.0035
Ethylbenzene	200,000	400	13		< 0.0077	< 0.0049	< 0.0088
2-Hexanone	NC	NC	NC		< 0.031	< 0.020	< 0.035
4-Methyl-2-pentanone	NC	NC	NC		< 0.031	< 0.020	< 0.035
Methylene chloride	760	24	0.02		< 0.015	< 0.0098	< 0.018
Methyl tert-butyl ether	20,000	8,800	0.32		< 0.0077	< 0.0049	< 0.0088
Styrene	410,000	1,500	4		< 0.0077	< 0.0049	< 0.0088
1,1,2,2-Tetrachloroethane	NC	NC	NC		< 0.0077	< 0.0049	< 0.0088
Tetrachloroethene	110	20	0.06		< 0.0077	< 0.0049	< 0.0088
Toluene	410,000	650	12		< 0.0077	< 0.0049	< 0.0088
1,1,1-Trichloroethane	NC	1,200	2		< 0.0077	< 0.0049	< 0.0088
1,1,2-Trichloroethane	8,200	1,800	0.02		< 0.0077	< 0.0049	< 0.0088
Trichloroethene	520	8.9	0.06		< 0.0077	< 0.0049	< 0.0088
Vinyl chloride	7.9	1.1	0.01		< 0.0077	0.011	< 0.0088
Xylenes, Total	410,000	320	150		< 0.023	< 0.015	< 0.027

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1a
Soil Analytical Results
VOCs Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW	Sample	B-6-09011	B-8-0103	B-9-0507
				Date	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	*Class I*	**Depth (ft)**	9-11	1-3	5-7
VOCs							
Acetone	NC	100,000	25		< 0.078	< 0.078	< 0.091
Benzene	100	1.6	0.03		< 0.0052	< 0.0052	< 0.0061
Bromodichloromethane	92	3,000	0.6		< 0.0052	< 0.0052	< 0.0061
Bromoform	720	100	0.8		< 0.0052	< 0.0052	< 0.0061
Bromomethane	2,900	15	0.2		< 0.010	< 0.010	< 0.012
2-Butanone	NC	NC	NC		< 0.078	< 0.078	< 0.091
Carbon disulfide	200,000	720	32		< 0.052	< 0.052	< 0.061
Carbon tetrachloride	44	0.64	0.07		< 0.0052	< 0.0052	< 0.0061
Chlorobenzene	41,000	210	1		< 0.0052	< 0.0052	< 0.0061
Chloroethane	NC	NC	NC		< 0.010	< 0.010	< 0.012
Chloroform	940	0.54	0.6		< 0.0052	< 0.0052	< 0.0061
Chloromethane	NC	NC	NC		< 0.010	< 0.010	< 0.012
Dibromochloromethane	41,000	1,300	0.4		< 0.0052	< 0.0052	< 0.0061
1,1-Dichloroethane	200,000	1,700	23		< 0.0052	< 0.0052	< 0.0061
1,2-Dichloroethane	63	0.7	0.02		< 0.0052	< 0.0052	< 0.0061
1,1-Dichloroethene	100,000	470	0.06		< 0.0052	< 0.0052	< 0.0061
cis-1,2-Dichloroethene	20,000	1,200	0.4		< 0.0052	< 0.0052	< 0.0061
trans-1,2-Dichloroethene	41,000	3,100	0.7		< 0.0052	< 0.0052	< 0.0061
1,2-Dichloropropane	84	23	0.03		< 0.0052	< 0.0052	< 0.0061
cis-1,3-Dichloropropene	57	2.1	0.004		< 0.0021	< 0.0021	< 0.0024
trans-1,3-Dichloropropene	57	2.1	0.004		< 0.0021	< 0.0021	< 0.0024
Ethylbenzene	200,000	400	13		< 0.0052	< 0.0052	< 0.0061
2-Hexanone	NC	NC	NC		< 0.021	< 0.021	< 0.024
4-Methyl-2-pentanone	NC	NC	NC		< 0.021	< 0.021	< 0.024
Methylene chloride	760	24	0.02		< 0.010	< 0.010	< 0.012
Methyl tert-butyl ether	20,000	8,800	0.32		< 0.0052	< 0.0052	< 0.0061
Styrene	410,000	1,500	4		< 0.0052	< 0.0052	< 0.0061
1,1,2,2-Tetrachloroethane	NC	NC	NC		< 0.0052	< 0.0052	< 0.0061
Tetrachloroethene	110	20	0.06		< 0.0052	< 0.0052	< 0.0061
Toluene	410,000	650	12		< 0.0052	< 0.0052	< 0.0061
1,1,1-Trichloroethane	NC	1,200	2		< 0.0052	< 0.0052	< 0.0061
1,1,2-Trichloroethane	8,200	1,800	0.02		< 0.0052	< 0.0052	< 0.0061
Trichloroethene	520	8.9	0.06		< 0.0052	< 0.0052	< 0.0061
Vinyl chloride	7.9	1.1	0.01		< 0.0052	< 0.0052	< 0.0061
Xylenes, Total	410,000	320	150		< 0.016	< 0.016	< 0.018

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1b
Soil Analytical Results
SVOCs Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW	Sample	B-1-0305	B-3-010012	B-5-0305
				Date	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	*Class I*	**Depth (ft)**	3-5	10-12	3-5
SVOCs							
Aniline	NC	NC	NC		< 0.39	< 0.39	< 0.36
Benzidine	NC	NC	NC		< 0.38	< 0.39	< 0.36
Benzoic acid	1,000,000	NC	400*		< 0.96	< 0.98	< 0.90
Benzyl alcohol	NC	NC	NC		< 0.20	< 0.20	< 0.19
Bis(2-chloroethoxy)methane	NC	NC	NC		< 0.20	< 0.20	< 0.19
Bis(2-chloroethyl)ether	5	0.47	0.0004		< 0.20	< 0.20	< 0.19
Bis(2-ethylhexyl)phthalate	410	31,000	3,600		< 0.96	< 0.98	< 0.90
4-Bromophenyl phenyl ether	NC	NC	NC		< 0.20	< 0.20	< 0.19
Butyl benzyl phthalate	410,000	930	930		< 0.20	< 0.20	< 0.19
Carbazole	290	NC	0.6		< 0.20	< 0.20	< 0.19
4-Chloroaniline	8,200	NC	0.7		< 0.20	< 0.20	< 0.19
4-Chloro-3-methylphenol	NC	NC	NC		< 0.38	< 0.39	< 0.36
2-Chloronaphthalene	NC	NC	NC		< 0.20	< 0.20	< 0.19
2-Chlorophenol	10,000	53,000	3.6 to 1.5*		< 0.20	< 0.20	< 0.19
4-Chlorophenyl phenyl ether	NC	NC	NC		< 0.20	< 0.20	< 0.19
Dibenzofuran	NC	NC	NC		< 0.20	< 0.20	< 0.19
1,2-Dichlorobenzene	180,000	560	17		< 0.20	< 0.20	< 0.19
1,3-Dichlorobenzene	NC	NC	NC		< 0.20	< 0.20	< 0.19
1,4-Dichlorobenzene	NC	17,000	2		< 0.20	< 0.20	< 0.19
3,3´-Dichlorobenzidine	13	NC	0.007		< 0.20	< 0.20	< 0.19
2,4-Dichlorophenol	6,100	NC	0.86 to 0.48*		< 0.20	< 0.20	< 0.19
Diethyl phthalate	1,000,000	2,000	470		< 0.20	< 0.20	< 0.19
2,4-Dimethylphenol	41,000	NC	9		< 0.20	< 0.20	< 0.19
Dimethyl phthalate	NC	NC	NC		< 0.20	< 0.20	< 0.19
4,6-Dinitro-2-methylphenol	NC	NC	NC		< 0.38	< 0.39	< 0.36
2,4-Dinitrophenol	4,100	NC	0.2		< 0.96	< 0.98	< 0.90
2,4-Dinitrotoluene	8.4	NC	0.0008		< 0.038	< 0.039	< 0.036
2,6-Dinitrotoluene	8.4	NC	0.0007		< 0.038	< 0.039	< 0.036
Di-n-butyl phthalate	200,000	2,300	2,300		< 0.20	< 0.20	< 0.19
Di-n-octyl phthalate	41,000	10,000	10,000		< 0.20	< 0.20	< 0.19
Hexachlorobenzene	4	1.8	2		< 0.20	< 0.20	< 0.19
Hexachlorobutadiene	NC	NC	NC		< 0.20	< 0.20	< 0.19
Hexachlorocyclopentadiene	14,000	16	400		< 0.20	< 0.20	< 0.19
Hexachloroethane	2,000	NC	0.5		< 0.20	< 0.20	< 0.19
Isophorone	410,000	4,600	8		< 0.20	< 0.20	< 0.19
2-Methylnaphthalene	NC	NC	NC		< 0.20	< 0.20	< 0.19
2-Methylphenol	100,000	NC	15		< 0.20	< 0.20	< 0.19
4-Methylphenol	NC	NC	NC		< 0.20	< 0.20	< 0.19
2-Nitroaniline	NC	NC	NC		< 0.20	< 0.20	< 0.19
3-Nitroaniline	NC	NC	NC		< 0.20	< 0.20	< 0.19
4-Nitroaniline	NC	NC	NC		< 0.20	< 0.20	< 0.19
2-Nitrophenol	NC	NC	NC		< 0.20	< 0.20	< 0.19
4-Nitrophenol	NC	NC	NC		< 0.38	< 0.39	< 0.36
Nitrobenzene	1,000	140	0.1		< 0.038	< 0.039	< 0.036
N-Nitrosodi-n-propylamine	0.8	NC	0.00005		< 0.038	< 0.039	< 0.036
N-Nitrosodimethylamine	NC	NC	NC		< 0.20	< 0.20	< 0.19
N-Nitrosodiphenylamine	1,200	NC	1		< 0.038	< 0.039	< 0.036
2, 2'-oxybis(1-Chloropropane)	NC	NC	NC		< 0.20	< 0.20	< 0.19
Pentachlorophenol	24	NC	0.02*		< 0.038	< 0.039	< 0.036
Phenol	610,000	NC	100		< 0.20	< 0.20	< 0.19
Pyridine	NC	NC	NC		< 0.78	< 0.79	< 0.73
1,2,4-Trichlorobenzene	20,000	3,200	5		< 0.20	< 0.20	< 0.19
2,4,5-Trichlorophenol	200,000	NC	130 to 26*		< 0.20	< 0.20	< 0.19
2,4,6-Trichlorophenol	520	390	0.09 to 0.07*		< 0.20	< 0.20	< 0.19

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. * = Appendix B, Table C, pH specific SROs

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1b
Soil Analytical Results
SVOCs Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW	Sample	B-6-09011	B-8-0103	B-9-0507
				Date	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	*Class I*	**Depth (ft)**	9-11	1-3	5-7
SVOCs							
Aniline	NC	NC	NC		< 0.39	< 0.35	< 0.43
Benzidine	NC	NC	NC		< 0.39	< 0.35	< 0.42
Benzoic acid	1,000,000	NC	400*		< 0.98	< 0.88	< 1.1
Benzyl alcohol	NC	NC	NC		< 0.20	< 0.18	< 0.22
Bis(2-chloroethoxy)methane	NC	NC	NC		< 0.20	< 0.18	< 0.22
Bis(2-chloroethyl)ether	5	0.47	0.0004		< 0.20	< 0.18	< 0.22
Bis(2-ethylhexyl)phthalate	410	31,000	3,600		< 0.98	< 0.88	< 1.1
4-Bromophenyl phenyl ether	NC	NC	NC		< 0.20	< 0.18	< 0.22
Butyl benzyl phthalate	410,000	930	930		< 0.20	< 0.18	< 0.22
Carbazole	290	NC	0.6		< 0.20	< 0.18	< 0.22
4-Chloroaniline	8,200	NC	0.7		< 0.20	< 0.18	< 0.22
4-Chloro-3-methylphenol	NC	NC	NC		< 0.39	< 0.35	< 0.42
2-Chloronaphthalene	NC	NC	NC		< 0.20	< 0.18	< 0.22
2-Chlorophenol	10,000	53,000	3.6 to 1.5*		< 0.20	< 0.18	< 0.22
4-Chlorophenyl phenyl ether	NC	NC	NC		< 0.20	< 0.18	< 0.22
Dibenzofuran	NC	NC	NC		< 0.20	< 0.18	< 0.22
1,2-Dichlorobenzene	180,000	560	17		< 0.20	< 0.18	< 0.22
1,3-Dichlorobenzene	NC	NC	NC		< 0.20	< 0.18	< 0.22
1,4-Dichlorobenzene	NC	17,000	2		< 0.20	< 0.18	< 0.22
3,3´-Dichlorobenzidine	13	NC	0.007		< 0.20	< 0.18	< 0.22
2,4-Dichlorophenol	6,100	NC	0.86 to 0.48*		< 0.20	< 0.18	< 0.22
Diethyl phthalate	1,000,000	2,000	470		< 0.20	< 0.18	< 0.22
2,4-Dimethylphenol	41,000	NC	9		< 0.20	< 0.18	< 0.22
Dimethyl phthalate	NC	NC	NC		< 0.20	< 0.18	< 0.22
4,6-Dinitro-2-methylphenol	NC	NC	NC		< 0.39	< 0.35	< 0.42
2,4-Dinitrophenol	4,100	NC	0.2		< 0.98	< 0.88	< 1.1
2,4-Dinitrotoluene	8.4	NC	0.0008		< 0.039	< 0.035	< 0.042
2,6-Dinitrotoluene	8.4	NC	0.0007		< 0.039	< 0.035	< 0.042
Di-n-butyl phthalate	200,000	2,300	2,300		< 0.20	< 0.18	< 0.22
Di-n-octyl phthalate	41,000	10,000	10,000		< 0.20	< 0.18	< 0.22
Hexachlorobenzene	4	1.8	2		< 0.20	< 0.18	< 0.22
Hexachlorobutadiene	NC	NC	NC		< 0.20	< 0.18	< 0.22
Hexachlorocyclopentadiene	14,000	16	400		< 0.20	< 0.18	< 0.22
Hexachloroethane	2,000	NC	0.5		< 0.20	< 0.18	< 0.22
Isophorone	410,000	4,600	8		< 0.20	< 0.18	< 0.22
2-Methylnaphthalene	NC	NC	NC		< 0.20	< 0.18	< 0.22
2-Methylphenol	100,000	NC	15		< 0.20	< 0.18	< 0.22
4-Methylphenol	NC	NC	NC		< 0.20	< 0.18	< 0.22
2-Nitroaniline	NC	NC	NC		< 0.20	< 0.18	< 0.22
3-Nitroaniline	NC	NC	NC		< 0.20	< 0.18	< 0.22
4-Nitroaniline	NC	NC	NC		< 0.20	< 0.18	< 0.22
2-Nitrophenol	NC	NC	NC		< 0.20	< 0.18	< 0.22
4-Nitrophenol	NC	NC	NC		< 0.39	< 0.35	< 0.42
Nitrobenzene	1,000	140	0.1		< 0.039	< 0.035	< 0.042
N-Nitrosodi-n-propylamine	0.8	NC	0.00005		< 0.039	< 0.035	< 0.042
N-Nitrosodimethylamine	NC	NC	NC		< 0.20	< 0.18	< 0.22
N-Nitrosodiphenylamine	1,200	NC	1		< 0.039	< 0.035	< 0.042
2, 2'-oxybis(1-Chloropropane)	NC	NC	NC		< 0.20	< 0.18	< 0.22
Pentachlorophenol	24	NC	0.02*		< 0.039	< 0.035	< 0.042
Phenol	610,000	NC	100		< 0.20	< 0.18	< 0.22
Pyridine	NC	NC	NC		< 0.79	< 0.71	< 0.86
1,2,4-Trichlorobenzene	20,000	3,200	5		< 0.20	< 0.18	< 0.22
2,4,5-Trichlorophenol	200,000	NC	130 to 26*		< 0.20	< 0.18	< 0.22
2,4,6-Trichlorophenol	520	390	0.09 to 0.07*		< 0.20	< 0.18	< 0.22

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. * = Appendix B, Table C, pH specific SROs

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1c
Soil Analytical Results
PNAs Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW	Sample	B-1-0305	B-1-011012	B-2-0204	B-2-010012
				Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	*Class I*	Depth (ft)	3-5	11-12	2-4	10-12
PNAs								
Acenaphthene	120,000	NC	570		0.054	< 0.039	< 0.038	< 0.038
Acenaphthylene	NC	NC	NC		0.17	< 0.039	< 0.038	< 0.038
Anthracene	610,000	NC	12,000		0.26	< 0.039	0.039	< 0.038
Benzo(a)anthracene	8	NC	2		1.1	< 0.039	0.24	< 0.038
Benzo(a)pyrene	1.3*	NC	8		1.8	< 0.039	0.21	< 0.038
Benzo(b)fluoranthene	8	NC	5		1.1	< 0.039	0.18	< 0.038
Benzo(g,h,i)perylene	NC	NC	NC		1.3	< 0.039	0.12	< 0.038
Benzo(k)fluoranthene	78	NC	49		1.3	< 0.039	0.17	< 0.038
Chrysene	780	NC	160		1.1	< 0.039	0.24	< 0.038
Dibenzo(a,h)anthracene	0.8	NC	2		0.5	< 0.039	0.067	< 0.038
Fluoranthene	82,000	NC	4,300		1.6	< 0.039	0.43	< 0.038
Fluorene	82,000	NC	560		0.06	< 0.039	< 0.038	< 0.038
Indeno(1,2,3-cd)pyrene	8	NC	14		1	< 0.039	0.12	< 0.038
Naphthalene	41,000	270	12		0.044	< 0.039	< 0.038	< 0.038
Phenanthrene	NC	NC	NC		0.49	< 0.039	0.15	< 0.038
Pyrene	61,000	NC	4,200		1.8	< 0.039	0.43	< 0.038

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. * = Location specific background value

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1c
Soil Analytical Results
PNAs Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW	Sample	B-3-0305	B-3-010012	B-4-0204	B-4-010012
				Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	*Class I*	Depth (ft)	3-5	10-12	2-4	10-12
PNAs								
Acenaphthene	120,000	NC	570		0.038	< 0.039	< 0.037	< 0.039
Acenaphthylene	NC	NC	NC		0.51	< 0.039	< 0.037	< 0.039
Anthracene	610,000	NC	12,000		0.43	< 0.039	< 0.037	< 0.039
Benzo(a)anthracene	8	NC	2		2.8	< 0.039	< 0.037	< 0.039
Benzo(a)pyrene	1.3*	NC	8		3.4	< 0.039	< 0.037	< 0.039
Benzo(b)fluoranthene	8	NC	5		2.5	< 0.039	< 0.037	< 0.039
Benzo(g,h,i)perylene	NC	NC	NC		1.7	< 0.039	< 0.037	< 0.039
Benzo(k)fluoranthene	78	NC	49		2.7	< 0.039	< 0.037	< 0.039
Chrysene	780	NC	160		2.8	< 0.039	< 0.037	< 0.039
Dibenzo(a,h)anthracene	0.8	NC	2		1.1	< 0.039	< 0.037	< 0.039
Fluoranthene	82,000	NC	4,300		3.6	< 0.039	< 0.037	< 0.039
Fluorene	82,000	NC	560		< 0.037	< 0.039	< 0.037	< 0.039
Indeno(1,2,3-cd)pyrene	8	NC	14		1.8	< 0.039	< 0.037	< 0.039
Naphthalene	41,000	270	12		0.05	< 0.039	< 0.037	< 0.039
Phenanthrene	NC	NC	NC		0.76	< 0.039	< 0.037	< 0.039
Pyrene	61,000	NC	4,200		3.5	< 0.039	< 0.037	< 0.039

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. * = Location specific background value

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1c
Soil Analytical Results
PNAs Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW	Sample	B-5-0305	B-5-010012	B-6-0103	B-6-09011
				Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	*Class I*	Depth (ft)	3-5	10-12	1-3	9-11
PNAs								
Acenaphthene	120,000	NC	570		0.07	< 0.039	0.12	< 0.039
Acenaphthylene	NC	NC	NC		0.044	< 0.039	0.081	< 0.039
Anthracene	610,000	NC	12,000		0.27	< 0.039	0.57	< 0.039
Benzo(a)anthracene	8	NC	2		1.5	< 0.039	1.3	< 0.039
Benzo(a)pyrene	1.3*	NC	8		1.4	< 0.039	1.2	< 0.039
Benzo(b)fluoranthene	8	NC	5		1.4	< 0.039	1.2	< 0.039
Benzo(g,h,i)perylene	NC	NC	NC		0.97	< 0.039	0.73	< 0.039
Benzo(k)fluoranthene	78	NC	49		1.2	< 0.039	1.1	< 0.039
Chrysene	780	NC	160		1.5	< 0.039	1.4	< 0.039
Dibenzo(a,h)anthracene	0.8	NC	2		0.44	< 0.039	0.22	< 0.039
Fluoranthene	82,000	NC	4,300		2.7	< 0.039	3.1	< 0.039
Fluorene	82,000	NC	560		0.061	< 0.039	0.22	< 0.039
Indeno(1,2,3-cd)pyrene	8	NC	14		0.89	< 0.039	0.71	< 0.039
Naphthalene	41,000	270	12		< 0.036	< 0.039	0.096	< 0.039
Phenanthrene	NC	NC	NC		1.1	< 0.039	2.4	< 0.039
Pyrene	61,000	NC	4,200		2.3	< 0.039	2.4	< 0.039

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. * = Location specific background value

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1c
Soil Analytical Results
PNAs Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW	Sample	B-7-0103	B-7-010012	B-8-0103	B-8-08010
				Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	*Class I*	Depth (ft)	1-3	10-12	1-3	8-10
PNAs								
Acenaphthene	120,000	NC	570		0.42	< 0.043	0.23	< 0.039
Acenaphthylene	NC	NC	NC		0.71	< 0.043	0.053	< 0.039
Anthracene	610,000	NC	12,000		1.9	< 0.043	0.79	< 0.039
Benzo(a)anthracene	8	NC	2		8.6	0.049	1.8	< 0.039
Benzo(a)pyrene	1.3*	NC	8		7.9	0.053	1.8	< 0.039
Benzo(b)fluoranthene	8	NC	5		7.4	< 0.043	1.4	< 0.039
Benzo(g,h,i)perylene	NC	NC	NC		3.8	< 0.043	1.1	< 0.039
Benzo(k)fluoranthene	78	NC	49		3.8	0.046	1.5	< 0.039
Chrysene	780	NC	160		8.5	0.051	1.7	< 0.039
Dibenzo(a,h)anthracene	0.8	NC	2		1.2	< 0.043	0.35	< 0.039
Fluoranthene	82,000	NC	4,300		18	0.094	3.5	< 0.039
Fluorene	82,000	NC	560		0.6	< 0.043	0.26	< 0.039
Indeno(1,2,3-cd)pyrene	8	NC	14		3.6	< 0.043	0.97	< 0.039
Naphthalene	41,000	270	12		0.27	< 0.043	0.16	< 0.039
Phenanthrene	NC	NC	NC		9.5	0.061	2.9	< 0.039
Pyrene	61,000	NC	4,200		15	0.08	3.3	< 0.039

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. * = Location specific background value

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1c
Soil Analytical Results
PNAs Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW	Sample	B-9-0103	B-9-0507	B-10-0103	B-10-0709
				Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	*Class I*	Depth (ft)	1-3	5-7	1-3	7-9
PNAs								
Acenaphthene	120,000	NC	570		0.074	< 0.042	0.73	< 0.041
Acenaphthylene	NC	NC	NC		0.99	< 0.042	0.76	< 0.041
Anthracene	610,000	NC	12,000		0.91	< 0.042	2.9	< 0.041
Benzo(a)anthracene	8	NC	2		4.1	< 0.042	7	0.088
Benzo(a)pyrene	1.3*	NC	8		3.9	< 0.042	6.1	0.085
Benzo(b)fluoranthene	8	NC	5		3.4	< 0.042	5.8	0.067
Benzo(g,h,i)perylene	NC	NC	NC		2.3	< 0.042	3.6	0.06
Benzo(k)fluoranthene	78	NC	49		3.3	< 0.042	5	0.076
Chrysene	780	NC	160		3.7	< 0.042	6.8	0.089
Dibenzo(a,h)anthracene	0.8	NC	2		1.1	< 0.042	1.7	< 0.041
Fluoranthene	82,000	NC	4,300		6.5	< 0.042	15	0.15
Fluorene	82,000	NC	560		0.21	< 0.042	1.4	< 0.041
Indeno(1,2,3-cd)pyrene	8	NC	14		2.3	< 0.042	3.6	0.056
Naphthalene	41,000	270	12		0.14	< 0.042	0.44	< 0.041
Phenanthrene	NC	NC	NC		2.8	< 0.042	12	0.087
Pyrene	61,000	NC	4,200		5.8	< 0.042	13	0.15

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. * = Location specific background value

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1d
Soil Analytical Results
Inorganics and pH Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW (CLASS I)					Sample	B-1-0305	B-1-011012	B-2-0204	B-2-010012
			pH 7.25	*pH 7.75*	*pH 8.25*	*pH 8.75*	*mg/L*	**Date**	08/02/2018	08/02/2018	08/02/2018	08/02/2018
Inorganics	*Ingestion*	*Inhalation*	*to 7.74*	*to 8.24*	*to 8.74*	*to 9.0*		**Depth (ft)**	3-5	11-12	2-4	10-12
(mg/kg)												
Aluminum	NC	NC	NC	NC	NC	NC	NC		5500	NA	NA	NA
Antimony	820	NC	5	5	5	5	NC		< 2.0	NA	NA	NA
Arsenic	13	1,200	30	31	32	33	NC		11	5.5	14	11
Barium	140,000	910,000	1,800	2,100	2,100	2,100	NC		66	28	94	49
Beryllium	4,100	2,100	1,000	8,000	NC	NC	NC		0.71	NA	NA	NA
Cadmium	2,000	2,800	59	430	430	430	NC		0.61	< 0.53	1.5	< 0.49
Calcium	NC	NC	NC	NC	NC	NC	NC		46000	NA	NA	NA
Chromium	6,100	420	32	28	24	21	NC		12	16	12	20
Cobalt	120,000	NC	NC	NC	NC	NC	NC		7.4	NA	NA	NA
Copper	82,000	NC	330,000	330,000	NC	NC	NC		99	NA	NA	NA
Cyanide	41,000	NC	40	40	40	40	NC		< 0.29	NA	NA	NA
Iron	NC	NC	NC	NC	NC	NC	NC		21000	NA	NA	NA
Lead	800	NC	107	107	107	282	NC		220	16	100	14
Magnesium	NC	NC	NC	NC	NC	NC	NC		21000	NA	NA	NA
Manganese	41,000	91,000	NC	NC	NC	NC	NC		280	NA	NA	NA
Mercury[c]	610	16	6.4	8	8	8	NC		0.36	0.034	0.41	< 0.022
Nickel	41,000	21,000	700	3,800	NC	NC	NC		19	NA	NA	NA
Potassium	NC	NC	NC	NC	NC	NC	NC		1000	NA	NA	NA
Selenium	10,000	NC	3.3	2.4	1.8	1.3	NC		< 0.98	1.8	< 0.99	< 0.99
Silver	10,000	NC	39	110	110	110	NC		< 0.98	< 1.1	< 0.99	< 0.99
Sodium	NC	NC	NC	NC	NC	NC	NC		400	NA	NA	NA
Thallium	160.0	NC	3.4	3.8	4.4	4.9	NC		< 0.98	NA	NA	NA
Vanadium	14,000	NC	980	980	980	980	NC		19	NA	NA	NA
Zinc	610,000	NC	16,000	53,000	NC	NC	NC		180	NA	NA	NA
pH	NC	NC	NC	NC	NC	NC	NC		8.1	7.81	8.38	8.15
TCLP (mg/L)												
Lead	NC	NC	NC	NC	NC	NC	0.0075		NA	NA	NA	NA
SPLP (mg/L)												
Iron	NC	NC	NC	NC	NC	NC	5		NA	NA	NA	NA
Lead	NC	NC	NC	NC	NC	NC	0.0075		NA	NA	NA	NA
Manganese	NC	NC	NC	NC	NC	NC	0.15		NA	NA	NA	NA
Selenium	NC	NC	NC	NC	NC	NC	0.05		NA	< 0.0040	NA	NA

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. * = SCGW exposure route excluded under footnote m of Appendix B Table B of Section 742
4. [c] = Inhalation Exposure Routes for Mercury excluded under footnote s of the TACO Appendix B Table B of Section 742. Inhalation remediation objective only applies at sites where elemental mercury is a contaminant of concern.

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1d
Soil Analytical Results
Inorganics and pH Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW (CLASS I)					Sample	B-3-0305	B-3-010012	B-4-0204	B-4-010012
								Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018
Inorganics	*Ingestion*	*Inhalation*	*pH 7.25 to 7.74*	*pH 7.75 to 8.24*	*pH 8.25 to 8.74*	*pH 8.75 to 9.0*	*mg/L*	**Depth (ft)**	3-5	10-12	2-4	10-12
(mg/kg)												
Aluminum	NC	NC	NC	NC	NC	NC	NC		NA	11000	NA	NA
Antimony	820	NC	5	5	5	5	NC		NA	< 2.1	NA	NA
Arsenic	13	1,200	30	31	32	33	NC		7.4	6.9	3.7	6.7
Barium	140,000	910,000	1,800	2,100	2,100	2,100	NC		39	80	41	5.9
Beryllium	4,100	2,100	1,000	8,000	NC	NC	NC		NA	0.6	NA	NA
Cadmium	2,000	2,800	59	430	430	430	NC		< 0.49	< 0.53	< 0.51	< 0.51
Calcium	NC	NC	NC	NC	NC	NC	NC		NA	61000	NA	NA
Chromium	6,100	420	32	28	24	21	NC		7.9	22	8.1	4.5
Cobalt	120,000	NC	NC	NC	NC	NC	NC		NA	14	NA	NA
Copper	82,000	NC	330,000	330,000	NC	NC	NC		NA	31	NA	NA
Cyanide	41,000	NC	40	40	40	40	NC		NA	< 0.30	NA	NA
Iron	NC	NC	NC	NC	NC	NC	NC		NA	26000	NA	NA
Lead	800	NC	107	107	107	282	NC		89	16	21	3.4
Magnesium	NC	NC	NC	NC	NC	NC	NC		NA	30000	NA	NA
Manganese	41,000	91,000	NC	NC	NC	NC	NC		NA	430	NA	NA
Mercury[c]	610	16	6.4	8	8	8	NC		0.78	0.023	0.17	< 0.023
Nickel	41,000	21,000	700	3,800	NC	NC	NC		NA	38	NA	NA
Potassium	NC	NC	NC	NC	NC	NC	NC		NA	2600	NA	NA
Selenium	10,000	NC	3.3	2.4	1.8	1.3	NC		< 0.98	< 1.1	< 1.0	< 1.0
Silver	10,000	NC	39	110	110	110	NC		< 0.98	< 1.1	< 1.0	< 1.0
Sodium	NC	NC	NC	NC	NC	NC	NC		NA	950	NA	NA
Thallium	160.0	NC	3.4	3.8	4.4	4.9	NC		NA	< 1.1	NA	NA
Vanadium	14,000	NC	980	980	980	980	NC		NA	22	NA	NA
Zinc	610,000	NC	16,000	53,000	NC	NC	NC		NA	58	NA	NA
pH	NC	NC	NC	NC	NC	NC	NC		8.2	8.35	8.45	8.15
TCLP (mg/L)												
Lead	NC	NC	NC	NC	NC	NC	0.0075		NA	NA	NA	NA
SPLP (mg/L)												
Iron	NC	NC	NC	NC	NC	NC	5		NA	NA	NA	NA
Lead	NC	NC	NC	NC	NC	NC	0.0075		NA	NA	NA	NA
Manganese	NC	NC	NC	NC	NC	NC	0.15		NA	NA	NA	NA
Selenium	NC	NC	NC	NC	NC	NC	0.05		NA	NA	NA	NA

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. * = SCGW exposure route excluded under footnote m of Appendix B Table B of Section 742
4. [c] = Inhalation Exposure Routes for Mercury excluded under footnote s of the TACO Appendix B Table B of Section 742. Inhalation remediation objective only applies at sites where elemental mercury is a contaminant of concern.

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1d
Soil Analytical Results
Inorganics and pH Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW (CLASS I)					Sample	B-5-0305	B-5-010012	B-6-0103	B-6-09011
								Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018
Inorganics (mg/kg)	*Ingestion*	*Inhalation*	*pH 7.25 to 7.74*	*pH 7.75 to 8.24*	*pH 8.25 to 8.74*	*pH 8.75 to 9.0*	*mg/L*	**Depth (ft)**	3-5	10-12	1-3	9-11
Aluminum	NC	NC	NC	NC	NC	NC	NC		5500	NA	NA	9000
Antimony	820	NC	5	5	5	5	NC		< 2.0	NA	NA	< 2.0
Arsenic	13	1,200	30	31	32	33	NC		3.2	4.5	9.2	3.9
Barium	140,000	910,000	1,800	2,100	2,100	2,100	NC		95	8.3	270	48
Beryllium	4,100	2,100	1,000	8,000	NC	NC	NC		0.53	NA	NA	0.55
Cadmium	2,000	2,800	59	430	430	430	NC		< 0.49	< 0.54	0.81	< 0.51
Calcium	NC	NC	NC	NC	NC	NC	NC		150000	NA	NA	62000
Chromium	6,100	420	32	28	24	21	NC		13	6.7	16	18
Cobalt	120,000	NC	NC	NC	NC	NC	NC		2.9	NA	NA	15
Copper	82,000	NC	330,000	330,000	NC	NC	NC		26	NA	NA	43
Cyanide	41,000	NC	40	40	40	40	NC		< 0.28	NA	NA	< 0.30
Iron	NC	NC	NC	NC	NC	NC	NC		23000	NA	NA	30000
Lead	800	NC	107	107	107	282	NC		120	7.5	170	20
Magnesium	NC	NC	NC	NC	NC	NC	NC		56000	NA	NA	36000
Manganese	41,000	91,000	NC	NC	NC	NC	NC		710	NA	NA	650
Mercury[c]	610	16	6.4	8	8	8	NC		0.073	< 0.023	0.43	< 0.022
Nickel	41,000	21,000	700	3,800	NC	NC	NC		10	NA	NA	37
Potassium	NC	NC	NC	NC	NC	NC	NC		700	NA	NA	2000
Selenium	10,000	NC	3.3	2.4	1.8	1.3	NC		< 0.99	1.2	1	1.1
Silver	10,000	NC	39	110	110	110	NC		< 0.99	< 1.1	< 1.0	< 1.0
Sodium	NC	NC	NC	NC	NC	NC	NC		750	NA	NA	140
Thallium	160.0	NC	3.4	3.8	4.4	4.9	NC		< 0.99	NA	NA	< 1.0
Vanadium	14,000	NC	980	980	980	980	NC		17	NA	NA	20
Zinc	610,000	NC	16,000	53,000	NC	NC	NC		190	NA	NA	54
pH	NC	NC	NC	NC	NC	NC	NC		9.16	8.24	7.92	7.75
TCLP (mg/L)												
Lead	NC	NC	NC	NC	NC	NC	0.0075		NA	NA	NA	NA
SPLP (mg/L)												
Iron	NC	NC	NC	NC	NC	NC	5		NA	NA	NA	0.16
Lead	NC	NC	NC	NC	NC	NC	0.0075		NA	NA	0.011	NA
Manganese	NC	NC	NC	NC	NC	NC	0.15		NA	NA	NA	< 0.0040
Selenium	NC	NC	NC	NC	NC	NC	0.05		NA	NA	NA	NA

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. * = SCGW exposure route excluded under footnote m of Appendix B Table B of Section 742
4. [c] = Inhalation Exposure Routes for Mercury excluded under footnote s of the TACO Appendix B Table B of Section 742. Inhalation remediation objective only applies at sites where elemental mercury is a contaminant of concern.

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1d
Soil Analytical Results
Inorganics and pH Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW (CLASS I)					Sample	B-7-0103	B-7-010012	B-8-0103	B-8-08010
								Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018
Inorganics (mg/kg)	*Ingestion*	*Inhalation*	*pH 7.25 to 7.74*	*pH 7.75 to 8.24*	*pH 8.25 to 8.74*	*pH 8.75 to 9.0*	*mg/L*	**Depth (ft)**	1-3	10-12	1-3	8-10
Aluminum	NC	NC	NC	NC	NC	NC	NC		NA	NA	4900	NA
Antimony	820	NC	5	5	5	5	NC		NA	NA	< 1.8	NA
Arsenic	13	1,200	30	31	32	33	NC		9.1	15	5.7	3.4
Barium	140,000	910,000	1,800	2,100	2,100	2,100	NC		260	68	95	61
Beryllium	4,100	2,100	1,000	8,000	NC	NC	NC		NA	NA	0.55	NA
Cadmium	2,000	2,800	59	430	430	430	NC		0.77	< 0.58	1	< 0.49
Calcium	NC	NC	NC	NC	NC	NC	NC		NA	NA	73000	NA
Chromium	6,100	420	32	28	24	21	NC		36	23	12	21
Cobalt	120,000	NC	NC	NC	NC	NC	NC		NA	NA	5.8	NA
Copper	82,000	NC	330,000	330,000	NC	NC	NC		NA	NA	87	NA
Cyanide	41,000	NC	40	40	40	40	NC		NA	NA	< 0.27	NA
Iron	NC	NC	NC	NC	NC	NC	NC		NA	NA	17000	NA
Lead	800	NC	107	107	107	282	NC		330	93	290	20
Magnesium	NC	NC	NC	NC	NC	NC	NC		NA	NA	35000	NA
Manganese	41,000	91,000	NC	NC	NC	NC	NC		NA	NA	350	NA
Mercury[c]	610	16	6.4	8	8	8	NC		0.27	0.57	0.47	< 0.019
Nickel	41,000	21,000	700	3,800	NC	NC	NC		NA	NA	17	NA
Potassium	NC	NC	NC	NC	NC	NC	NC		NA	NA	800	NA
Selenium	10,000	NC	3.3	2.4	1.8	1.3	NC		1.4	1.4	1.2	0.99
Silver	10,000	NC	39	110	110	110	NC		< 0.98	< 1.2	< 0.92	< 0.99
Sodium	NC	NC	NC	NC	NC	NC	NC		NA	NA	210	NA
Thallium	160.0	NC	3.4	3.8	4.4	4.9	NC		NA	NA	< 0.92	NA
Vanadium	14,000	NC	980	980	980	980	NC		NA	NA	19	NA
Zinc	610,000	NC	16,000	53,000	NC	NC	NC		NA	NA	130	NA
pH	NC	NC	NC	NC	NC	NC	NC		8.18	8.01	7.83	7.35
TCLP (mg/L)												
Lead	NC	NC	NC	NC	NC	NC	0.0075		NA	NA	NA	NA
SPLP (mg/L)												
Iron	NC	NC	NC	NC	NC	NC	5		NA	NA	1.1	NA
Lead	NC	NC	NC	NC	NC	NC	0.0075		NA	NA	0.0096	NA
Manganese	NC	NC	NC	NC	NC	NC	0.15		NA	NA	NA	NA
Selenium	NC	NC	NC	NC	NC	NC	0.05		NA	NA	NA	NA

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. * = SCGW exposure route excluded under footnote m of Appendix B Table B of Section 742
4. [c] = Inhalation Exposure Routes for Mercury excluded under footnote s of the TACO Appendix B Table B of Section 742. Inhalation remediation objective only applies at sites where elemental mercury is a contaminant of concern.

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1d
Soil Analytical Results
Inorganics and pH Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW (CLASS I)					Sample	B-9-0103	B-9-0507	B-10-0103	B-10-0709
								Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018
Inorganics (mg/kg)	*Ingestion*	*Inhalation*	*pH 7.25 to 7.74*	*pH 7.75 to 8.24*	*pH 8.25 to 8.74*	*pH 8.75 to 9.0*	*mg/L*	**Depth (ft)**	1-3	5-7	1-3	7-9
Aluminum	NC	NC	NC	NC	NC	NC	NC		NA	4400	NA	NA
Antimony	820	NC	5	5	5	5	NC		NA	< 2.3	NA	NA
Arsenic	13	1,200	30	31	32	33	NC		10	9.6	9.7	6.3
Barium	140,000	910,000	1,800	2,100	2,100	2,100	NC		250	18	380	17
Beryllium	4,100	2,100	1,000	8,000	NC	NC	NC		NA	< 0.57	NA	NA
Cadmium	2,000	2,800	59	430	430	430	NC		0.54	< 0.57	1.7	< 0.56
Calcium	NC	NC	NC	NC	NC	NC	NC		NA	32000	NA	NA
Chromium	6,100	420	32	28	24	21	NC		32	10	31	7.1
Cobalt	120,000	NC	NC	NC	NC	NC	NC		NA	6.4	NA	NA
Copper	82,000	NC	330,000	330,000	NC	NC	NC		NA	18	NA	NA
Cyanide	41,000	NC	40	40	40	40	NC		NA	< 0.32	NA	NA
Iron	NC	NC	NC	NC	NC	NC	NC		NA	12000	NA	NA
Lead	800	NC	107	107	107	282	NC		2200	26	750	34
Magnesium	NC	NC	NC	NC	NC	NC	NC		NA	18000	NA	NA
Manganese	41,000	91,000	NC	NC	NC	NC	NC		NA	250	NA	NA
Mercury[c]	610	16	6.4	8	8	8	NC		1.5	< 0.020	0.87	< 0.022
Nickel	41,000	21,000	700	3,800	NC	NC	NC		NA	17	NA	NA
Potassium	NC	NC	NC	NC	NC	NC	NC		NA	930	NA	NA
Selenium	10,000	NC	3.3	2.4	1.8	1.3	NC		1.3	1.7	1.4	1.2
Silver	10,000	NC	39	110	110	110	NC		< 1.0	< 1.1	< 0.96	< 1.1
Sodium	NC	NC	NC	NC	NC	NC	NC		NA	140	NA	NA
Thallium	160.0	NC	3.4	3.8	4.4	4.9	NC		NA	< 1.1	NA	NA
Vanadium	14,000	NC	980	980	980	980	NC		NA	31	NA	NA
Zinc	610,000	NC	16,000	53,000	NC	NC	NC		NA	69	NA	NA
pH	NC	NC	NC	NC	NC	NC	NC		7.99	7.85	8.22	8.01
TCLP (mg/L)												
Lead	NC	NC	NC	NC	NC	NC	0.0075		0.82	NA	NA	NA
SPLP (mg/L)												
Iron	NC	NC	NC	NC	NC	NC	5		NA	NA	NA	NA
Lead	NC	NC	NC	NC	NC	NC	0.0075		NA	NA	NA	NA
Manganese	NC	NC	NC	NC	NC	NC	0.15		NA	NA	NA	NA
Selenium	NC	NC	NC	NC	NC	NC	0.05		NA	< 0.0040	NA	NA

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. * = SCGW exposure route excluded under footnote m of Appendix B Table B of Section 742
4. [c] = Inhalation Exposure Routes for Mercury excluded under footnote s of the TACO Appendix B Table B of Section 742. Inhalation remediation objective only applies at sites where elemental mercury is a contaminant of concern.

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1e
Soil Analytical Results
Pesticides, Herbicides, and PCBs Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW	Sample	B-1-0305	B-3-010012	B-5-0305
				Date	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	*Class I*	**Depth (ft)**	3-5	10-12	3-5
Pesticides							
4,4´-DDD	24	NC	16		< 0.0019	< 0.0019	< 0.0017
4,4´-DDE	17	NC	54		< 0.0019	< 0.0019	< 0.0017
4,4´-DDT	17	1,500	32		< 0.0019	< 0.0019	< 0.0017
Aldrin	0.3	6.6	0.5		< 0.0019	< 0.0019	< 0.0017
alpha-BHC	0.9	1.5	0.0005		< 0.0019	< 0.0019	< 0.0017
alpha-Chlordane	NC	NC	NC		< 0.0019	< 0.0019	< 0.0017
beta-BHC	NC	NC	NC		< 0.0019	< 0.0019	< 0.0017
Chlordane	16	140	10		< 0.019	< 0.019	< 0.017
delta-BHC	NC	NC	NC		< 0.0019	< 0.0019	< 0.0017
Dieldrin	0.4	2.2	0.004		< 0.0019	< 0.0019	< 0.0017
Endosulfan I	12,000	NC	18		< 0.0019	< 0.0019	< 0.0017
Endosulfan II	12,000	NC	18		< 0.0019	< 0.0019	< 0.0017
Endosulfan sulfate	NC	NC	NC		< 0.0019	< 0.0019	< 0.0017
Endrin	610	NC	1		< 0.0019	< 0.0019	< 0.0017
Endrin aldehyde	NC	NC	NC		< 0.0019	< 0.0019	< 0.0017
Endrin ketone	NC	NC	NC		< 0.0019	< 0.0019	< 0.0017
gamma-BHC	4	NC	0.009		< 0.0019	< 0.0019	< 0.0017
gamma-Chlordane	NC	NC	NC		< 0.0019	< 0.0019	< 0.0017
Heptachlor	1	11	23		< 0.0019	< 0.0019	< 0.0017
Heptachlor epoxide	0.6	9.2	0.7		< 0.0019	< 0.0019	< 0.0017
Methoxychlor	10,000	NC	160		< 0.0019	< 0.0019	< 0.0017
Toxaphene	5.2	170	31		< 0.039	< 0.038	< 0.036
PCBs							
Aroclor 1016	NC	NC	NC		< 0.094	< 0.093	< 0.087
Aroclor 1221	NC	NC	NC		< 0.094	< 0.093	< 0.087
Aroclor 1232	NC	NC	NC		< 0.094	< 0.093	< 0.087
Aroclor 1242	NC	NC	NC		< 0.094	< 0.093	< 0.087
Aroclor 1248	NC	NC	NC		< 0.094	< 0.093	< 0.087
Aroclor 1254	NC	NC	NC		< 0.094	< 0.093	0.16
Aroclor 1260	NC	NC	NC		< 0.094	< 0.093	< 0.087
Total PCBs	1	NC	NC		ND	ND	0.16

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. ND = Not Detected at the reporting limit
5. * = Appendix B, Table C, pH specific SROs

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE # 1e
Soil Analytical Results
Pesticides, Herbicides, and PCBs Compared to TACO Tier 1 Industrial/Commercial and SCGW
Damen Green Line Elevated CTA Station

	INDUSTRIAL/ COMMERCIAL		SCGW	Sample	B-6-09011	B-8-0103	B-9-0507
				Date	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	*Class I*	**Depth (ft)**	9-11	1-3	5-7
Pesticides							
4,4´-DDD	24	NC	16		< 0.0019	< 0.0017	< 0.0020
4,4´-DDE	17	NC	54		< 0.0019	< 0.0017	< 0.0020
4,4´-DDT	17	1,500	32		< 0.0019	< 0.0017	< 0.0020
Aldrin	0.3	6.6	0.5		< 0.0019	< 0.0017	< 0.0020
alpha-BHC	0.9	1.5	0.0005		< 0.0019	< 0.0017	< 0.0020
alpha-Chlordane	NC	NC	NC		< 0.0019	< 0.0017	< 0.0020
beta-BHC	NC	NC	NC		< 0.0019	< 0.0017	< 0.0020
Chlordane	16	140	10		< 0.019	< 0.017	< 0.020
delta-BHC	NC	NC	NC		< 0.0019	< 0.0017	< 0.0020
Dieldrin	0.4	2.2	0.004		< 0.0019	< 0.0017	< 0.0020
Endosulfan I	12,000	NC	18		< 0.0019	< 0.0017	< 0.0020
Endosulfan II	12,000	NC	18		< 0.0019	< 0.0017	< 0.0020
Endosulfan sulfate	NC	NC	NC		< 0.0019	< 0.0017	< 0.0020
Endrin	610	NC	1		< 0.0019	< 0.0017	< 0.0020
Endrin aldehyde	NC	NC	NC		< 0.0019	< 0.0017	< 0.0020
Endrin ketone	NC	NC	NC		< 0.0019	< 0.0017	< 0.0020
gamma-BHC	4	NC	0.009		< 0.0019	< 0.0017	< 0.0020
gamma-Chlordane	NC	NC	NC		< 0.0019	< 0.0017	< 0.0020
Heptachlor	1	11	23		< 0.0019	< 0.0017	< 0.0020
Heptachlor epoxide	0.6	9.2	0.7		< 0.0019	< 0.0017	< 0.0020
Methoxychlor	10,000	NC	160		< 0.0019	< 0.0017	< 0.0020
Toxaphene	5.2	170	31		< 0.039	< 0.035	< 0.042
PCBs							
Aroclor 1016	NC	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1221	NC	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1232	NC	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1242	NC	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1248	NC	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1254	NC	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1260	NC	NC	NC		< 0.094	< 0.084	< 0.10
Total PCBs	1	NC	NC		ND	ND	ND

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. ND = Not Detected at the reporting limit
5. * = Appendix B, Table C, pH specific SROs

Sample result above TACO Industrial/Commercial (I/C) Ingestion and/or Inhalation. Sample may also exceed SCGW.

Sample result above TACO Soil Component of the Groundwater (SCGW) Ingestion Exposure Route screening criteria. Does not exceed TACO Residential.

TABLE 2

Soil Analytical Results Compared to CCDD MAC Values

TABLE # 2a
Soil Analytical Results
VOCs Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

	CCDD MAC Values	Sample	B-1-0305	B-3-010012	B-5-0305
		Date	08/02/2018	08/02/2018	08/02/2018
		Depth (ft)	3-5	10-12	3-5
VOCs					
Acetone	25		< 0.12	< 0.073	< 0.13
Benzene	0.03		< 0.0077	< 0.0049	< 0.0088
Bromodichloromethane	0.6		< 0.0077	< 0.0049	< 0.0088
Bromoform	0.8		< 0.0077	< 0.0049	< 0.0088
Bromomethane	0.2		< 0.015	< 0.0098	< 0.018
2-Butanone	NC		< 0.12	< 0.073	< 0.13
Carbon disulfide	9		< 0.077	< 0.049	< 0.088
Carbon tetrachloride	0.07		< 0.0077	< 0.0049	< 0.0088
Chlorobenzene	1		< 0.0077	< 0.0049	< 0.0088
Chloroethane	NC		< 0.015	< 0.0098	< 0.018
Chloroform	0.3		< 0.0077	< 0.0049	< 0.0088
Chloromethane	NC		< 0.015	< 0.0098	< 0.018
Dibromochloromethane	0.4		< 0.0077	< 0.0049	< 0.0088
1,1-Dichloroethane	23		< 0.0077	< 0.0049	< 0.0088
1,2-Dichloroethane	0.02		< 0.0077	< 0.0049	< 0.0088
1,1-Dichloroethene	0.06		< 0.0077	< 0.0049	< 0.0088
cis-1,2-Dichloroethene	0.4		< 0.0077	< 0.0049	< 0.0088
trans-1,2-Dichloroethene	0.7		< 0.0077	< 0.0049	< 0.0088
1,2-Dichloropropane	0.03		< 0.0077	< 0.0049	< 0.0088
cis-1,3-Dichloropropene	0.005		< 0.0031	< 0.0020	< 0.0035
trans-1,3-Dichloropropene	0.005		< 0.0031	< 0.0020	< 0.0035
Ethylbenzene	13		< 0.0077	< 0.0049	< 0.0088
2-Hexanone	NC		< 0.031	< 0.020	< 0.035
4-Methyl-2-pentanone	NC		< 0.031	< 0.020	< 0.035
Methylene chloride	0.02		< 0.015	< 0.0098	< 0.018
Methyl tert-butyl ether	0.32		< 0.0077	< 0.0049	< 0.0088
Styrene	4		< 0.0077	< 0.0049	< 0.0088
1,1,2,2-Tetrachloroethane	NC		< 0.0077	< 0.0049	< 0.0088
Tetrachloroethene	0.06		< 0.0077	< 0.0049	< 0.0088
Toluene	12		< 0.0077	< 0.0049	< 0.0088
1,1,1-Trichloroethane	2		< 0.0077	< 0.0049	< 0.0088
1,1,2-Trichloroethane	0.02		< 0.0077	< 0.0049	< 0.0088
Trichloroethene	0.06		< 0.0077	< 0.0049	< 0.0088
Vinyl chloride	0.01		< 0.0077	0.011	< 0.0088
Xylenes, Total	5.6		< 0.023	< 0.015	< 0.027

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above CCDD Metropolitan MAC Values.

TABLE # 2a
Soil Analytical Results
VOCs Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

	CCDD MAC Values	Sample	B-6-09011	B-8-0103	B-9-0507
		Date	08/02/2018	08/02/2018	08/02/2018
		Depth (ft)	9-11	1-3	5-7
VOCs					
Acetone	25		< 0.078	< 0.078	< 0.091
Benzene	0.03		< 0.0052	< 0.0052	< 0.0061
Bromodichloromethane	0.6		< 0.0052	< 0.0052	< 0.0061
Bromoform	0.8		< 0.0052	< 0.0052	< 0.0061
Bromomethane	0.2		< 0.010	< 0.010	< 0.012
2-Butanone	NC		< 0.078	< 0.078	< 0.091
Carbon disulfide	9		< 0.052	< 0.052	< 0.061
Carbon tetrachloride	0.07		< 0.0052	< 0.0052	< 0.0061
Chlorobenzene	1		< 0.0052	< 0.0052	< 0.0061
Chloroethane	NC		< 0.010	< 0.010	< 0.012
Chloroform	0.3		< 0.0052	< 0.0052	< 0.0061
Chloromethane	NC		< 0.010	< 0.010	< 0.012
Dibromochloromethane	0.4		< 0.0052	< 0.0052	< 0.0061
1,1-Dichloroethane	23		< 0.0052	< 0.0052	< 0.0061
1,2-Dichloroethane	0.02		< 0.0052	< 0.0052	< 0.0061
1,1-Dichloroethene	0.06		< 0.0052	< 0.0052	< 0.0061
cis-1,2-Dichloroethene	0.4		< 0.0052	< 0.0052	< 0.0061
trans-1,2-Dichloroethene	0.7		< 0.0052	< 0.0052	< 0.0061
1,2-Dichloropropane	0.03		< 0.0052	< 0.0052	< 0.0061
cis-1,3-Dichloropropene	0.005		< 0.0021	< 0.0021	< 0.0024
trans-1,3-Dichloropropene	0.005		< 0.0021	< 0.0021	< 0.0024
Ethylbenzene	13		< 0.0052	< 0.0052	< 0.0061
2-Hexanone	NC		< 0.021	< 0.021	< 0.024
4-Methyl-2-pentanone	NC		< 0.021	< 0.021	< 0.024
Methylene chloride	0.02		< 0.010	< 0.010	< 0.012
Methyl tert-butyl ether	0.32		< 0.0052	< 0.0052	< 0.0061
Styrene	4		< 0.0052	< 0.0052	< 0.0061
1,1,2,2-Tetrachloroethane	NC		< 0.0052	< 0.0052	< 0.0061
Tetrachloroethene	0.06		< 0.0052	< 0.0052	< 0.0061
Toluene	12		< 0.0052	< 0.0052	< 0.0061
1,1,1-Trichloroethane	2		< 0.0052	< 0.0052	< 0.0061
1,1,2-Trichloroethane	0.02		< 0.0052	< 0.0052	< 0.0061
Trichloroethene	0.06		< 0.0052	< 0.0052	< 0.0061
Vinyl chloride	0.01		< 0.0052	< 0.0052	< 0.0061
Xylenes, Total	5.6		< 0.016	< 0.016	< 0.018

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above CCDD Metropolitan MAC Values.

TABLE # 2b
Soil Analytical Results
SVOCs Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

	CCDD MAC Values	Sample	B-1-0305	B-3-010012	B-5-0305
		Date	08/02/2018	08/02/2018	08/02/2018
		Depth (ft)	3-5	10-12	3-5
SVOCs					
Aniline	NC		< 0.39	< 0.39	< 0.36
Benzidine	NC		< 0.38	< 0.39	< 0.36
Benzoic acid	400		< 0.96	< 0.98	< 0.90
Benzyl alcohol	NC		< 0.20	< 0.20	< 0.19
Bis(2-chloroethoxy)methane	NC		< 0.20	< 0.20	< 0.19
Bis(2-chloroethyl)ether	0.66		< 0.20	< 0.20	< 0.19
Bis(2-ethylhexyl)phthalate	46		< 0.96	< 0.98	< 0.90
4-Bromophenyl phenyl ether	NC		< 0.20	< 0.20	< 0.19
Butyl benzyl phthalate	930		< 0.20	< 0.20	< 0.19
Carbazole	0.6		< 0.20	< 0.20	< 0.19
4-Chloroaniline	0.7		< 0.20	< 0.20	< 0.19
4-Chloro-3-methylphenol	NC		< 0.38	< 0.39	< 0.36
2-Chloronaphthalene	NC		< 0.20	< 0.20	< 0.19
2-Chlorophenol	1.5		< 0.20	< 0.20	< 0.19
4-Chlorophenyl phenyl ether	NC		< 0.20	< 0.20	< 0.19
Dibenzofuran	NC		< 0.20	< 0.20	< 0.19
1,2-Dichlorobenzene	17		< 0.20	< 0.20	< 0.19
1,3-Dichlorobenzene	NC		< 0.20	< 0.20	< 0.19
1,4-Dichlorobenzene	2		< 0.20	< 0.20	< 0.19
3,3´-Dichlorobenzidine	1.3		< 0.20	< 0.20	< 0.19
2,4-Dichlorophenol	0.48		< 0.20	< 0.20	< 0.19
Diethyl phthalate	470		< 0.20	< 0.20	< 0.19
2,4-Dimethylphenol	9		< 0.20	< 0.20	< 0.19
Dimethyl phthalate	NC		< 0.20	< 0.20	< 0.19
4,6-Dinitro-2-methylphenol	NC		< 0.38	< 0.39	< 0.36
2,4-Dinitrophenol	3.3		< 0.96	< 0.98	< 0.90
2,4-Dinitrotoluene	0.25		< 0.038	< 0.039	< 0.036
2,6-Dinitrotoluene	0.26		< 0.038	< 0.039	< 0.036
Hexachlorocyclopentadiene	1.1		< 0.20	< 0.20	< 0.19
Hexachloroethane	0.5		< 0.20	< 0.20	< 0.19
Isophorone	8		< 0.20	< 0.20	< 0.19
2-Methylnaphthalene	NC		< 0.20	< 0.20	< 0.19
2-Methylphenol	15		< 0.20	< 0.20	< 0.19
4-Methylphenol	NC		< 0.20	< 0.20	< 0.19
2-Nitroaniline	NC		< 0.20	< 0.20	< 0.19
3-Nitroaniline	NC		< 0.20	< 0.20	< 0.19
4-Nitroaniline	NC		< 0.20	< 0.20	< 0.19
2-Nitrophenol	NC		< 0.20	< 0.20	< 0.19
4-Nitrophenol	NC		< 0.38	< 0.39	< 0.36
Nitrobenzene	0.26		< 0.038	< 0.039	< 0.036
N-Nitrosodi-n-propylamine	0.0018		< 0.038	< 0.039	< 0.036
N-Nitrosodimethylamine	NC		< 0.20	< 0.20	< 0.19
N-Nitrosodiphenylamine	1		< 0.038	< 0.039	< 0.036
2, 2'-oxybis(1-Chloropropane)	NC		< 0.20	< 0.20	< 0.19
Phenol	100		< 0.20	< 0.20	< 0.19
Pyridine	NC		< 0.78	< 0.79	< 0.73
1,2,4-Trichlorobenzene	5		< 0.20	< 0.20	< 0.19
2,4,5-Trichlorophenol	26		< 0.20	< 0.20	< 0.19
2,4,6-Trichlorophenol	0.66		< 0.20	< 0.20	< 0.19

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above CCDD Metropolitan MAC Values.

TABLE # 2b
Soil Analytical Results
SVOCs Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

	CCDD MAC Values	Sample	B-6-09011	B-8-0103	B-9-0507
		Date	08/02/2018	08/02/2018	08/02/2018
		Depth (ft)	9-11	1-3	5-7
SVOCs					
Aniline	NC		< 0.39	< 0.35	< 0.43
Benzidine	NC		< 0.39	< 0.35	< 0.42
Benzoic acid	400		< 0.98	< 0.88	< 1.1
Benzyl alcohol	NC		< 0.20	< 0.18	< 0.22
Bis(2-chloroethoxy)methane	NC		< 0.20	< 0.18	< 0.22
Bis(2-chloroethyl)ether	0.66		< 0.20	< 0.18	< 0.22
Bis(2-ethylhexyl)phthalate	46		< 0.98	< 0.88	< 1.1
4-Bromophenyl phenyl ether	NC		< 0.20	< 0.18	< 0.22
Butyl benzyl phthalate	930		< 0.20	< 0.18	< 0.22
Carbazole	0.6		< 0.20	< 0.18	< 0.22
4-Chloroaniline	0.7		< 0.20	< 0.18	< 0.22
4-Chloro-3-methylphenol	NC		< 0.39	< 0.35	< 0.42
2-Chloronaphthalene	NC		< 0.20	< 0.18	< 0.22
2-Chlorophenol	1.5		< 0.20	< 0.18	< 0.22
4-Chlorophenyl phenyl ether	NC		< 0.20	< 0.18	< 0.22
Dibenzofuran	NC		< 0.20	< 0.18	< 0.22
1,2-Dichlorobenzene	17		< 0.20	< 0.18	< 0.22
1,3-Dichlorobenzene	NC		< 0.20	< 0.18	< 0.22
1,4-Dichlorobenzene	2		< 0.20	< 0.18	< 0.22
3,3´-Dichlorobenzidine	1.3		< 0.20	< 0.18	< 0.22
2,4-Dichlorophenol	0.48		< 0.20	< 0.18	< 0.22
Diethyl phthalate	470		< 0.20	< 0.18	< 0.22
2,4-Dimethylphenol	9		< 0.20	< 0.18	< 0.22
Dimethyl phthalate	NC		< 0.20	< 0.18	< 0.22
4,6-Dinitro-2-methylphenol	NC		< 0.39	< 0.35	< 0.42
2,4-Dinitrophenol	3.3		< 0.98	< 0.88	< 1.1
2,4-Dinitrotoluene	0.25		< 0.039	< 0.035	< 0.042
2,6-Dinitrotoluene	0.26		< 0.039	< 0.035	< 0.042
Hexachlorocyclopentadiene	1.1		< 0.20	< 0.18	< 0.22
Hexachloroethane	0.5		< 0.20	< 0.18	< 0.22
Isophorone	8		< 0.20	< 0.18	< 0.22
2-Methylnaphthalene	NC		< 0.20	< 0.18	< 0.22
2-Methylphenol	15		< 0.20	< 0.18	< 0.22
4-Methylphenol	NC		< 0.20	< 0.18	< 0.22
2-Nitroaniline	NC		< 0.20	< 0.18	< 0.22
3-Nitroaniline	NC		< 0.20	< 0.18	< 0.22
4-Nitroaniline	NC		< 0.20	< 0.18	< 0.22
2-Nitrophenol	NC		< 0.20	< 0.18	< 0.22
4-Nitrophenol	NC		< 0.39	< 0.35	< 0.42
Nitrobenzene	0.26		< 0.039	< 0.035	< 0.042
N-Nitrosodi-n-propylamine	0.0018		< 0.039	< 0.035	< 0.042
N-Nitrosodimethylamine	NC		< 0.20	< 0.18	< 0.22
N-Nitrosodiphenylamine	1		< 0.039	< 0.035	< 0.042
2, 2'-oxybis(1-Chloropropane)	NC		< 0.20	< 0.18	< 0.22
Phenol	100		< 0.20	< 0.18	< 0.22
Pyridine	NC		< 0.79	< 0.71	< 0.86
1,2,4-Trichlorobenzene	5		< 0.20	< 0.18	< 0.22
2,4,5-Trichlorophenol	26		< 0.20	< 0.18	< 0.22
2,4,6-Trichlorophenol	0.66		< 0.20	< 0.18	< 0.22

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above CCDD Metropolitan MAC Values.

TABLE # 2c
Soil Analytical Results
PNAs Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

	CCDD MAC Values	CCDD MAC Values	Sample	B-1-0305	B-1-011012	B-2-0204	B-2-010012	B-3-0305
			Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Metropolitan	*City of Chicago*	Depth (ft)	3-5	11-12	2-4	10-12	3-5
PNAs								
Acenaphthene	570	570		0.054	< 0.039	< 0.038	< 0.038	0.038
Acenaphthylene	NC	NC		0.17	< 0.039	< 0.038	< 0.038	0.51
Anthracene	12,000	12,000		0.26	< 0.039	0.039	< 0.038	0.43
Benzo(a)anthracene	1.8	1.1		1.1	< 0.039	0.24	< 0.038	2.8
Benzo(a)pyrene	2.1	1.3		**1.8**	< 0.039	0.21	< 0.038	3.4
Benzo(b)fluoranthene	2.1	1.5		1.1	< 0.039	0.18	< 0.038	2.5
Benzo(g,h,i)perylene	NC	NC		1.3	< 0.039	0.12	< 0.038	1.7
Benzo(k)fluoranthene	9	9		1.3	< 0.039	0.17	< 0.038	2.7
Chrysene	88	88		1.1	< 0.039	0.24	< 0.038	2.8
Dibenzo(a,h)anthracene	0.42	0.2		0.5	< 0.039	0.067	< 0.038	1.1
Fluoranthene	3,100	3,100		1.6	< 0.039	0.43	< 0.038	3.6
Fluorene	560	560		0.06	< 0.039	< 0.038	< 0.038	< 0.037
Indeno(1,2,3-cd)pyrene	1.6	0.9		**1**	< 0.039	0.12	< 0.038	1.8
Naphthalene	1.8	1.8		0.044	< 0.039	< 0.038	< 0.038	0.05
Phenanthrene	NC	NC		0.49	< 0.039	0.15	< 0.038	0.76
Pyrene	2,300	2,300		1.8	< 0.039	0.43	< 0.038	3.5

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. **Bold** = Soil above City of Chicago MAC. Soil is only approved for disposal at a Metropolitan CCDD facility.

Sample result above CCDD Metropolitan MAC Values.

TABLE # 2c
Soil Analytical Results
PNAs Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

	CCDD MAC Values	CCDD MAC Values	Sample	B-3-010012	B-4-0204	B-4-010012	B-5-0305	B-5-010012
			Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Metropolitan	*City of Chicago*	Depth (ft)	10-12	2-4	10-12	3-5	10-12
PNAs								
Acenaphthene	570	570		< 0.039	< 0.037	< 0.039	0.07	< 0.039
Acenaphthylene	NC	NC		< 0.039	< 0.037	< 0.039	0.044	< 0.039
Anthracene	12,000	12,000		< 0.039	< 0.037	< 0.039	0.27	< 0.039
Benzo(a)anthracene	1.8	1.1		< 0.039	< 0.037	< 0.039	**1.5**	< 0.039
Benzo(a)pyrene	2.1	1.3		< 0.039	< 0.037	< 0.039	**1.4**	< 0.039
Benzo(b)fluoranthene	2.1	1.5		< 0.039	< 0.037	< 0.039	1.4	< 0.039
Benzo(g,h,i)perylene	NC	NC		< 0.039	< 0.037	< 0.039	0.97	< 0.039
Benzo(k)fluoranthene	9	9		< 0.039	< 0.037	< 0.039	1.2	< 0.039
Chrysene	88	88		< 0.039	< 0.037	< 0.039	1.5	< 0.039
Dibenzo(a,h)anthracene	0.42	0.2		< 0.039	< 0.037	< 0.039	0.44	< 0.039
Fluoranthene	3,100	3,100		< 0.039	< 0.037	< 0.039	2.7	< 0.039
Fluorene	560	560		< 0.039	< 0.037	< 0.039	0.061	< 0.039
Indeno(1,2,3-cd)pyrene	1.6	0.9		< 0.039	< 0.037	< 0.039	0.89	< 0.039
Naphthalene	1.8	1.8		< 0.039	< 0.037	< 0.039	< 0.036	< 0.039
Phenanthrene	NC	NC		< 0.039	< 0.037	< 0.039	1.1	< 0.039
Pyrene	2,300	2,300		< 0.039	< 0.037	< 0.039	2.3	< 0.039

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. **Bold** = Soil above City of Chicago MAC. Soil is only approved for disposal at a Metropolitan CCDD facility.

Sample result above CCDD Metropolitan MAC Values.

TABLE # 2c
Soil Analytical Results
PNAs Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

	CCDD MAC Values	CCDD MAC Values	Sample	B-6-0103	B-6-09011	B-7-0103	B-7-010012	B-8-0103
			Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Metropolitan	*City of Chicago*	Depth (ft)	1-3	9-11	1-3	10-12	1-3
PNAs								
Acenaphthene	570	570		0.12	< 0.039	0.42	< 0.043	0.23
Acenaphthylene	NC	NC		0.081	< 0.039	0.71	< 0.043	0.053
Anthracene	12,000	12,000		0.57	< 0.039	1.9	< 0.043	0.79
Benzo(a)anthracene	1.8	1.1		**1.3**	< 0.039	8.6	0.049	**1.8**
Benzo(a)pyrene	2.1	1.3		1.2	< 0.039	7.9	0.053	**1.8**
Benzo(b)fluoranthene	2.1	1.5		1.2	< 0.039	7.4	< 0.043	1.4
Benzo(g,h,i)perylene	NC	NC		0.73	< 0.039	3.8	< 0.043	1.1
Benzo(k)fluoranthene	9	9		1.1	< 0.039	3.8	0.046	1.5
Chrysene	88	88		1.4	< 0.039	8.5	0.051	1.7
Dibenzo(a,h)anthracene	0.42	0.2		**0.22**	< 0.039	1.2	< 0.043	**0.35**
Fluoranthene	3,100	3,100		3.1	< 0.039	18	0.094	3.5
Fluorene	560	560		0.22	< 0.039	0.6	< 0.043	0.26
Indeno(1,2,3-cd)pyrene	1.6	0.9		0.71	< 0.039	3.6	< 0.043	**0.97**
Naphthalene	1.8	1.8		0.096	< 0.039	0.27	< 0.043	0.16
Phenanthrene	NC	NC		2.4	< 0.039	9.5	0.061	2.9
Pyrene	2,300	2,300		2.4	< 0.039	15	0.08	3.3

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. **Bold** = Soil above City of Chicago MAC. Soil is only approved for disposal at a Metropolitan CCDD facility.

Sample result above CCDD Metropolitan MAC Values.

TABLE # 2c
Soil Analytical Results
PNAs Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

	CCDD MAC Values	CCDD MAC Values	Sample	B-8-08010	B-9-0103	B-9-0507	B-10-0103	B-10-0709
			Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Metropolitan	*City of Chicago*	Depth (ft)	8-10	1-3	5-7	1-3	7-9
PNAs								
Acenaphthene	570	570		< 0.039	0.074	< 0.042	0.73	< 0.041
Acenaphthylene	NC	NC		< 0.039	0.99	< 0.042	0.76	< 0.041
Anthracene	12,000	12,000		< 0.039	0.91	< 0.042	2.9	< 0.041
Benzo(a)anthracene	1.8	1.1		< 0.039	4.1	< 0.042	7	0.088
Benzo(a)pyrene	2.1	1.3		< 0.039	3.9	< 0.042	6.1	0.085
Benzo(b)fluoranthene	2.1	1.5		< 0.039	3.4	< 0.042	5.8	0.067
Benzo(g,h,i)perylene	NC	NC		< 0.039	2.3	< 0.042	3.6	0.06
Benzo(k)fluoranthene	9	9		< 0.039	3.3	< 0.042	5	0.076
Chrysene	88	88		< 0.039	3.7	< 0.042	6.8	0.089
Dibenzo(a,h)anthracene	0.42	0.2		< 0.039	1.1	< 0.042	1.7	< 0.041
Fluoranthene	3,100	3,100		< 0.039	6.5	< 0.042	15	0.15
Fluorene	560	560		< 0.039	0.21	< 0.042	1.4	< 0.041
Indeno(1,2,3-cd)pyrene	1.6	0.9		< 0.039	2.3	< 0.042	3.6	0.056
Naphthalene	1.8	1.8		< 0.039	0.14	< 0.042	0.44	< 0.041
Phenanthrene	NC	NC		< 0.039	2.8	< 0.042	12	0.087
Pyrene	2,300	2,300		< 0.039	5.8	< 0.042	13	0.15

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. **Bold** = Soil above City of Chicago MAC. Soil is only approved for disposal at a Metropolitan CCDD facility.

Sample result above CCDD Metropolitan MAC Values.

TABLE # 2d
Soil Analytical Results
Inorganics and pH Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

Inorganics (mg/kg)	CCDD MAC Values	Sample	B-1-0305	B-1-011012	B-2-0204	B-2-010012	B-3-0305	B-3-010012
		Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
		Depth (ft)	3-5	11-12	2-4	10-12	3-5	10-12
Aluminum	NC		5500	NA	NA	NA	NA	11000
Antimony	5		< 2.0	NA	NA	NA	NA	< 2.1
Arsenic	13		11	5.5	14	11	7.4	6.9
Barium	1,500		66	28	94	49	39	80
Beryllium	22		0.71	NA	NA	NA	NA	0.6
Cadmium	5.2		0.61	< 0.53	1.5	< 0.49	< 0.49	< 0.53
Calcium	NC		46000	NA	NA	NA	NA	61000
Chromium	21		12	16	12	20	7.9	22
Cobalt	20		7.4	NA	NA	NA	NA	14
Copper	2,900		99	NA	NA	NA	NA	31
Cyanide	40		< 0.29	NA	NA	NA	NA	< 0.30
Iron	15,900		21000	NA	NA	NA	NA	26000
Lead	107		220	16	100	14	89	16
Magnesium	325,000		21000	NA	NA	NA	NA	30000
Manganese	636		280	NA	NA	NA	NA	430
Mercury	0.89		0.36	0.034	0.41	< 0.022	0.78	0.023
Nickel	100		19	NA	NA	NA	NA	38
Potassium	NC		1000	NA	NA	NA	NA	2600
Selenium	1.3		< 0.98	1.8*	< 0.99	< 0.99	< 0.98	< 1.1
Silver	4.4		< 0.98	< 1.1	< 0.99	< 0.99	< 0.98	< 1.1
Sodium	NC		400	NA	NA	NA	NA	950
Thallium	2.6		< 0.98	NA	NA	NA	NA	< 1.1
Vanadium	550		19	NA	NA	NA	NA	22
Zinc	5,100		180	NA	NA	NA	NA	58
pH	6.25-9.0		8.10	7.81	8.38	8.15	8.20	8.35
TCLP (mg/L)								
Lead	0.0075		NA	NA	NA	NA	NA	NA
SPLP (mg/L)								
Iron	5		NA	NA	NA	NA	NA	NA
Lead	0.0075		NA	NA	NA	NA	NA	NA
Manganese	0.15		NA	NA	NA	NA	NA	NA
Selenium	0.05		NA	< 0.0040	NA	NA	NA	NA

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. * = Excluded under footnote m of the MAC Table

Sample result above CCDD Metropolitan MAC Values.

Sample result out of pH range for CCDD Metropolitan MAC Values.

TABLE # 2d
Soil Analytical Results
Inorganics and pH Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

Inorganics (mg/kg)	CCDD MAC Values	Sample	B-4-0204	B-4-010012	B-5-0305	B-5-010012	B-6-0103	B-6-09011
		Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
		Depth (ft)	2-4	10-12	3-5	10-12	1-3	9-11
Aluminum	NC		NA	NA	5500	NA	NA	9000
Antimony	5		NA	NA	< 2.0	NA	NA	< 2.0
Arsenic	13		3.7	6.7	3.2	4.5	9.2	3.9
Barium	1,500		41	5.9	95	8.3	270	48
Beryllium	22		NA	NA	0.53	NA	NA	0.55
Cadmium	5.2		< 0.51	< 0.51	< 0.49	< 0.54	0.81	< 0.51
Calcium	NC		NA	NA	150000	NA	NA	62000
Chromium	21		8.1	4.5	13	6.7	16	18
Cobalt	20		NA	NA	2.9	NA	NA	15
Copper	2,900		NA	NA	26	NA	NA	43
Cyanide	40		NA	NA	< 0.28	NA	NA	< 0.30
Iron	15,900		NA	NA	23000	NA	NA	30000*
Lead	107		21	3.4	120	7.5	170	20
Magnesium	325,000		NA	NA	56000	NA	NA	36000
Manganese	636		NA	NA	710	NA	NA	650*
Mercury	0.89		0.17	< 0.023	0.073	< 0.023	0.43	< 0.022
Nickel	100		NA	NA	10	NA	NA	37
Potassium	NC		NA	NA	700	NA	NA	2000
Selenium	1.3		< 1.0	< 1.0	< 0.99	1.2	1	1.1
Silver	4.4		< 1.0	< 1.0	< 0.99	< 1.1	< 1.0	< 1.0
Sodium	NC		NA	NA	750	NA	NA	140
Thallium	2.6		NA	NA	< 0.99	NA	NA	< 1.0
Vanadium	550		NA	NA	17	NA	NA	20
Zinc	5,100		NA	NA	190	NA	NA	54
pH	6.25-9.0		8.45	8.15	9.16	8.24	7.92	7.75
TCLP (mg/L)								
Lead	0.0075		NA	NA	NA	NA	NA	NA
SPLP (mg/L)								
Iron	5		NA	NA	NA	NA	NA	0.16
Lead	0.0075		NA	NA	NA	NA	0.011	NA
Manganese	0.15		NA	NA	NA	NA	NA	< 0.0040
Selenium	0.05		NA	NA	NA	NA	NA	NA

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. * = Excluded under footnote m of the MAC Table

Sample result above CCDD Metropolitan MAC Values.

Sample result out of pH range for CCDD Metropolitan MAC Values.

TABLE # 2d
Soil Analytical Results
Inorganics and pH Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

Inorganics (mg/kg)	CCDD MAC Values	Sample	B-7-0103	B-7-010012	B-8-0103	B-8-08010	B-9-0103	B-9-0507
		Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
		Depth (ft)	1-3	10-12	1-3	8-10	1-3	5-7
Aluminum	NC		NA	NA	4900	NA	NA	4400
Antimony	5		NA	NA	< 1.8	NA	NA	< 2.3
Arsenic	13		9.1	15	5.7	3.4	10	9.6
Barium	1,500		260	68	95	61	250	18
Beryllium	22		NA	NA	0.55	NA	NA	< 0.57
Cadmium	5.2		0.77	< 0.58	1	< 0.49	0.54	< 0.57
Calcium	NC		NA	NA	73000	NA	NA	32000
Chromium	21		36	23	12	21	32	10
Cobalt	20		NA	NA	5.8	NA	NA	6.4
Copper	2,900		NA	NA	87	NA	NA	18
Cyanide	40		NA	NA	< 0.27	NA	NA	< 0.32
Iron	15,900		NA	NA	17000*	NA	NA	12000
Lead	107		330	93	290	20	2200	26
Magnesium	325,000		NA	NA	35000	NA	NA	18000
Manganese	636		NA	NA	350	NA	NA	250
Mercury	0.89		0.27	0.57	0.47	< 0.019	1.5	< 0.020
Nickel	100		NA	NA	17	NA	NA	17
Potassium	NC		NA	NA	800	NA	NA	930
Selenium	1.3		1.4	1.4	1.2	0.99	1.3	1.7*
Silver	4.4		< 0.98	< 1.2	< 0.92	< 0.99	< 1.0	< 1.1
Sodium	NC		NA	NA	210	NA	NA	140
Thallium	2.6		NA	NA	< 0.92	NA	NA	< 1.1
Vanadium	550		NA	NA	19	NA	NA	31
Zinc	5,100		NA	NA	130	NA	NA	69
pH	6.25-9.0		8.18	8.01	7.83	7.35	7.99	7.85
TCLP (mg/L)								
Lead	0.0075		NA	NA	NA	NA	0.82	NA
SPLP (mg/L)								
Iron	5		NA	NA	1.1	NA	NA	NA
Lead	0.0075		NA	NA	0.0096	NA	NA	NA
Manganese	0.15		NA	NA	NA	NA	NA	NA
Selenium	0.05		NA	NA	NA	NA	NA	< 0.0040

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. * = Excluded under footnote m of the MAC Table

Sample result above CCDD Metropolitan MAC Values.

Sample result out of pH range for CCDD Metropolitan MAC Values.

TABLE # 2d
Soil Analytical Results
Inorganics and pH Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

Inorganics (mg/kg)	CCDD MAC Values	Sample	B-10-0103	B-10-0709
		Date	08/02/2018	08/02/2018
		Depth (ft)	1-3	7-9
Aluminum	NC		NA	NA
Antimony	5		NA	NA
Arsenic	13		9.7	6.3
Barium	1,500		380	17
Beryllium	22		NA	NA
Cadmium	5.2		1.7	< 0.56
Calcium	NC		NA	NA
Chromium	21		31	7.1
Cobalt	20		NA	NA
Copper	2,900		NA	NA
Cyanide	40		NA	NA
Iron	15,900		NA	NA
Lead	107		750	34
Magnesium	325,000		NA	NA
Manganese	636		NA	NA
Mercury	0.89		0.87	< 0.022
Nickel	100		NA	NA
Potassium	NC		NA	NA
Selenium	1.3		1.4	1.2
Silver	4.4		< 0.96	< 1.1
Sodium	NC		NA	NA
Thallium	2.6		NA	NA
Vanadium	550		NA	NA
Zinc	5,100		NA	NA
pH	6.25-9.0		8.22	8.01
TCLP (mg/L)				
Lead	0.0075		NA	NA
SPLP (mg/L)				
Iron	5		NA	NA
Lead	0.0075		NA	NA
Manganese	0.15		NA	NA
Selenium	0.05		NA	NA

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. * = Excluded under footnote m of the MAC Table

Sample result above CCDD Metropolitan MAC Values.

Sample result out of pH range for CCDD Metropolitan MAC Values.

TABLE # 2e
Soil Analytical Results
Pesticides, Herbicides, and PCBs Compared to CCDD MAC Values
EOWA - Contract 4659 - IN02

	CCDD MAC Values	Sample	B-1-0305	B-3-010012	B-5-0305	B-6-09011	B-8-0103	B-9-0507
		Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
		Depth (ft)	3-5	10-12	3-5	9-11	1-3	5-7
Pesticides								
4,4´-DDD	3		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
4,4´-DDE	2		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
4,4´-DDT	2		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Aldrin	0.94		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
alpha-BHC	0.0074		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
alpha-Chlordane	NC		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
beta-BHC	NC		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Chlordane	1.8		< 0.019	< 0.019	< 0.017	< 0.019	< 0.017	< 0.020
delta-BHC	NC		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Dieldrin	0.603		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Endosulfan I	18		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Endosulfan II	18		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Endosulfan sulfate	NC		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Endrin	1		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Endrin aldehyde	NC		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Endrin ketone	NC		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
gamma-BHC	0.009		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
gamma-Chlordane	NC		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Heptachlor	0.871		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Heptachlor epoxide	1.005		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Methoxychlor	160		< 0.0019	< 0.0019	< 0.0017	< 0.0019	< 0.0017	< 0.0020
Toxaphene	0.6		< 0.039	< 0.038	< 0.036	< 0.039	< 0.035	< 0.042
PCBs								
Aroclor 1016	NC		< 0.094	< 0.093	< 0.087	< 0.094	< 0.084	< 0.10
Aroclor 1221	NC		< 0.094	< 0.093	< 0.087	< 0.094	< 0.084	< 0.10
Aroclor 1232	NC		< 0.094	< 0.093	< 0.087	< 0.094	< 0.084	< 0.10
Aroclor 1242	NC		< 0.094	< 0.093	< 0.087	< 0.094	< 0.084	< 0.10
Aroclor 1248	NC		< 0.094	< 0.093	< 0.087	< 0.094	< 0.084	< 0.10
Aroclor 1254	NC		< 0.094	< 0.093	0.16	< 0.094	< 0.084	< 0.10
Aroclor 1260	NC		< 0.094	< 0.093	< 0.087	< 0.094	< 0.084	< 0.10
Total PCBs	1		ND	ND	0.16	ND	ND	ND

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. ND = Not Detected at the reporting limit

Sample result above CCDD Metropolitan MAC Values.

TABLE 3

Soil Analytical Results Compared to Construction Worker SROs

TABLE # 3a
Soil Analytical Results
VOCs Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample	B-1-0305	B-3-010012	B-5-0305
			Date	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	Depth (ft)	3-5	10-12	3-5
VOCs						
Acetone	NC	100,000		< 0.12	< 0.073	< 0.13
Benzene	2,300	2.2		< 0.0077	< 0.0049	< 0.0088
Bromodichloromethane	2,000	3,000		< 0.0077	< 0.0049	< 0.0088
Bromoform	16,000	140		< 0.0077	< 0.0049	< 0.0088
Bromomethane	1,000	3.9		< 0.015	< 0.0098	< 0.018
2-Butanone	NC	NC		< 0.12	< 0.073	< 0.13
Carbon disulfide	20,000	9		< 0.077	< 0.049	< 0.088
Carbon tetrachloride	410	0.9		< 0.0077	< 0.0049	< 0.0088
Chlorobenzene	4,100	1.3		< 0.0077	< 0.0049	< 0.0088
Chloroethane	NC	NC		< 0.015	< 0.0098	< 0.018
Chloroform	2,000	0.76		< 0.0077	< 0.0049	< 0.0088
Chloromethane	NC	NC		< 0.015	< 0.0098	< 0.018
Dibromochloromethane	41,000	1,300		< 0.0077	< 0.0049	< 0.0088
1,1-Dichloroethane	200,000	130		< 0.0077	< 0.0049	< 0.0088
1,2-Dichloroethane	1,400	0.99		< 0.0077	< 0.0049	< 0.0088
1,1-Dichloroethene	10,000	3		< 0.0077	< 0.0049	< 0.0088
cis-1,2-Dichloroethene	20,000	1,200		< 0.0077	< 0.0049	< 0.0088
trans-1,2-Dichloroethene	41,000	3,100		< 0.0077	< 0.0049	< 0.0088
1,2-Dichloropropane	1,800	0.5		< 0.0077	< 0.0049	< 0.0088
cis-1,3-Dichloropropene	1,200	0.39		< 0.0031	< 0.0020	< 0.0035
trans-1,3-Dichloropropene	1,200	0.39		< 0.0031	< 0.0020	< 0.0035
Ethylbenzene	20,000	58		< 0.0077	< 0.0049	< 0.0088
2-Hexanone	NC	NC		< 0.031	< 0.020	< 0.035
4-Methyl-2-pentanone	NC	NC		< 0.031	< 0.020	< 0.035
Methylene chloride	12,000	34		< 0.015	< 0.0098	< 0.018
Methyl tert-butyl ether	2,000	140		< 0.0077	< 0.0049	< 0.0088
Styrene	41,000	430		< 0.0077	< 0.0049	< 0.0088
1,1,2,2-Tetrachloroethane	NC	NC		< 0.0077	< 0.0049	< 0.0088
Tetrachloroethene	2,400	28		< 0.0077	< 0.0049	< 0.0088
Toluene	410,000	42		< 0.0077	< 0.0049	< 0.0088
1,1,1-Trichloroethane	NC	1,200		< 0.0077	< 0.0049	< 0.0088
1,1,2-Trichloroethane	8,200	1,800		< 0.0077	< 0.0049	< 0.0088
Trichloroethene	1,200	12		< 0.0077	< 0.0049	< 0.0088
Vinyl chloride	170	1.1		< 0.0077	0.011	< 0.0088
Xylenes, Total	41,000	5.6		< 0.023	< 0.015	< 0.027

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3a
Soil Analytical Results
VOCs Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample Date	B-6-09011 08/02/2018	B-8-0103 08/02/2018	B-9-0507 08/02/2018
	Ingestion	*Inhalation*	Depth (ft)	9-11	1-3	5-7
VOCs						
Acetone	NC	100,000		< 0.078	< 0.078	< 0.091
Benzene	2,300	2.2		< 0.0052	< 0.0052	< 0.0061
Bromodichloromethane	2,000	3,000		< 0.0052	< 0.0052	< 0.0061
Bromoform	16,000	140		< 0.0052	< 0.0052	< 0.0061
Bromomethane	1,000	3.9		< 0.010	< 0.010	< 0.012
2-Butanone	NC	NC		< 0.078	< 0.078	< 0.091
Carbon disulfide	20,000	9		< 0.052	< 0.052	< 0.061
Carbon tetrachloride	410	0.9		< 0.0052	< 0.0052	< 0.0061
Chlorobenzene	4,100	1.3		< 0.0052	< 0.0052	< 0.0061
Chloroethane	NC	NC		< 0.010	< 0.010	< 0.012
Chloroform	2,000	0.76		< 0.0052	< 0.0052	< 0.0061
Chloromethane	NC	NC		< 0.010	< 0.010	< 0.012
Dibromochloromethane	41,000	1,300		< 0.0052	< 0.0052	< 0.0061
1,1-Dichloroethane	200,000	130		< 0.0052	< 0.0052	< 0.0061
1,2-Dichloroethane	1,400	0.99		< 0.0052	< 0.0052	< 0.0061
1,1-Dichloroethene	10,000	3		< 0.0052	< 0.0052	< 0.0061
cis-1,2-Dichloroethene	20,000	1,200		< 0.0052	< 0.0052	< 0.0061
trans-1,2-Dichloroethene	41,000	3,100		< 0.0052	< 0.0052	< 0.0061
1,2-Dichloropropane	1,800	0.5		< 0.0052	< 0.0052	< 0.0061
cis-1,3-Dichloropropene	1,200	0.39		< 0.0021	< 0.0021	< 0.0024
trans-1,3-Dichloropropene	1,200	0.39		< 0.0021	< 0.0021	< 0.0024
Ethylbenzene	20,000	58		< 0.0052	< 0.0052	< 0.0061
2-Hexanone	NC	NC		< 0.021	< 0.021	< 0.024
4-Methyl-2-pentanone	NC	NC		< 0.021	< 0.021	< 0.024
Methylene chloride	12,000	34		< 0.010	< 0.010	< 0.012
Methyl tert-butyl ether	2,000	140		< 0.0052	< 0.0052	< 0.0061
Styrene	41,000	430		< 0.0052	< 0.0052	< 0.0061
1,1,2,2-Tetrachloroethane	NC	NC		< 0.0052	< 0.0052	< 0.0061
Tetrachloroethene	2,400	28		< 0.0052	< 0.0052	< 0.0061
Toluene	410,000	42		< 0.0052	< 0.0052	< 0.0061
1,1,1-Trichloroethane	NC	1,200		< 0.0052	< 0.0052	< 0.0061
1,1,2-Trichloroethane	8,200	1,800		< 0.0052	< 0.0052	< 0.0061
Trichloroethene	1,200	12		< 0.0052	< 0.0052	< 0.0061
Vinyl chloride	170	1.1		< 0.0052	< 0.0052	< 0.0061
Xylenes, Total	41,000	5.6		< 0.016	< 0.016	< 0.018

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3b
Soil Analytical Results
SVOCs Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample	B-1-0305	B-3-010012	B-5-0305
			Date	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	Depth (ft)	3-5	10-12	3-5
SVOCs						
Aniline	NC	NC		< 0.39	< 0.39	< 0.36
Benzidine	NC	NC		< 0.38	< 0.39	< 0.36
Benzoic acid	820,000	NC		< 0.96	< 0.98	< 0.90
Benzyl alcohol	NC	NC		< 0.20	< 0.20	< 0.19
Bis(2-chloroethoxy)methane	NC	NC		< 0.20	< 0.20	< 0.19
Bis(2-chloroethyl)ether	75	0.66		< 0.20	< 0.20	< 0.19
Bis(2-ethylhexyl)phthalate	4,100	31,000		< 0.96	< 0.98	< 0.90
4-Bromophenyl phenyl ether	NC	NC		< 0.20	< 0.20	< 0.19
Butyl benzyl phthalate	410,000	930		< 0.20	< 0.20	< 0.19
Carbazole	6,200	NC		< 0.20	< 0.20	< 0.19
4-Chloroaniline	820	NC		< 0.20	< 0.20	< 0.19
4-Chloro-3-methylphenol	NC	NC		< 0.38	< 0.39	< 0.36
2-Chloronaphthalene	NC	NC		< 0.20	< 0.20	< 0.19
2-Chlorophenol	10,000	53,000		< 0.20	< 0.20	< 0.19
4-Chlorophenyl phenyl ether	NC	NC		< 0.20	< 0.20	< 0.19
Dibenzofuran	NC	NC		< 0.20	< 0.20	< 0.19
1,2-Dichlorobenzene	18,000	310		< 0.20	< 0.20	< 0.19
1,3-Dichlorobenzene	NC	NC		< 0.20	< 0.20	< 0.19
1,4-Dichlorobenzene	NC	340		< 0.20	< 0.20	< 0.19
3,3´-Dichlorobenzidine	280	NC		< 0.20	< 0.20	< 0.19
2,4-Dichlorophenol	610	NC		< 0.20	< 0.20	< 0.19
Diethyl phthalate	1,000,000	2,000		< 0.20	< 0.20	< 0.19
2,4-Dimethylphenol	41,000	NC		< 0.20	< 0.20	< 0.19
Dimethyl phthalate	NC	NC		< 0.20	< 0.20	< 0.19
4,6-Dinitro-2-methylphenol	NC	NC		< 0.38	< 0.39	< 0.36
2,4-Dinitrophenol	410	NC		< 0.96	< 0.98	< 0.90
2,4-Dinitrotoluene	180	NC		< 0.038	< 0.039	< 0.036
2,6-Dinitrotoluene	180	NC		< 0.038	< 0.039	< 0.036
Di-n-butyl phthalate	200,000	2,300		< 0.20	< 0.20	< 0.19
Di-n-octyl phthalate	4,100	10,000		< 0.20	< 0.20	< 0.19
Hexachlorobenzene	78	2.6		< 0.20	< 0.20	< 0.19
Hexachlorobutadiene	NC	NC		< 0.20	< 0.20	< 0.19
Hexachlorocyclopentadiene	14,000	1.1		< 0.20	< 0.20	< 0.19
Hexachloroethane	2,000	NC		< 0.20	< 0.20	< 0.19
Isophorone	410,000	4,600		< 0.20	< 0.20	< 0.19
2-Methylnaphthalene	NC	NC		< 0.20	< 0.20	< 0.19
2-Methylphenol	100,000	NC		< 0.20	< 0.20	< 0.19
4-Methylphenol	NC	NC		< 0.20	< 0.20	< 0.19
2-Nitroaniline	NC	NC		< 0.20	< 0.20	< 0.19
3-Nitroaniline	NC	NC		< 0.20	< 0.20	< 0.19
4-Nitroaniline	NC	NC		< 0.20	< 0.20	< 0.19
2-Nitrophenol	NC	NC		< 0.20	< 0.20	< 0.19
4-Nitrophenol	NC	NC		< 0.38	< 0.39	< 0.36
Nitrobenzene	1,000	9.4		< 0.038	< 0.039	< 0.036
N-Nitrosodi-n-propylamine	18	NC		< 0.038	< 0.039	< 0.036
N-Nitrosodimethylamine	NC	NC		< 0.20	< 0.20	< 0.19
N-Nitrosodiphenylamine	25,000	NC		< 0.038	< 0.039	< 0.036
2, 2'-oxybis(1-Chloropropane)	NC	NC		< 0.20	< 0.20	< 0.19
Pentachlorophenol	520	NC		< 0.038	< 0.039	< 0.036
Phenol	61,000	NC		< 0.20	< 0.20	< 0.19
Pyridine	NC	NC		< 0.78	< 0.79	< 0.73
1,2,4-Trichlorobenzene	2,000	920		< 0.20	< 0.20	< 0.19
2,4,5-Trichlorophenol	200,000	NC		< 0.20	< 0.20	< 0.19
2,4,6-Trichlorophenol	11,000	540		< 0.20	< 0.20	< 0.19

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3b
Soil Analytical Results
SVOCs Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample	B-6-09011	B-8-0103	B-9-0507
			Date	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	Depth (ft)	9-11	1-3	5-7
SVOCs						
Aniline	NC	NC		< 0.39	< 0.35	< 0.43
Benzidine	NC	NC		< 0.39	< 0.35	< 0.42
Benzoic acid	820,000	NC		< 0.98	< 0.88	< 1.1
Benzyl alcohol	NC	NC		< 0.20	< 0.18	< 0.22
Bis(2-chloroethoxy)methane	NC	NC		< 0.20	< 0.18	< 0.22
Bis(2-chloroethyl)ether	75	0.66		< 0.20	< 0.18	< 0.22
Bis(2-ethylhexyl)phthalate	4,100	31,000		< 0.98	< 0.88	< 1.1
4-Bromophenyl phenyl ether	NC	NC		< 0.20	< 0.18	< 0.22
Butyl benzyl phthalate	410,000	930		< 0.20	< 0.18	< 0.22
Carbazole	6,200	NC		< 0.20	< 0.18	< 0.22
4-Chloroaniline	820	NC		< 0.20	< 0.18	< 0.22
4-Chloro-3-methylphenol	NC	NC		< 0.39	< 0.35	< 0.42
2-Chloronaphthalene	NC	NC		< 0.20	< 0.18	< 0.22
2-Chlorophenol	10,000	53,000		< 0.20	< 0.18	< 0.22
4-Chlorophenyl phenyl ether	NC	NC		< 0.20	< 0.18	< 0.22
Dibenzofuran	NC	NC		< 0.20	< 0.18	< 0.22
1,2-Dichlorobenzene	18,000	310		< 0.20	< 0.18	< 0.22
1,3-Dichlorobenzene	NC	NC		< 0.20	< 0.18	< 0.22
1,4-Dichlorobenzene	NC	340		< 0.20	< 0.18	< 0.22
3,3´-Dichlorobenzidine	280	NC		< 0.20	< 0.18	< 0.22
2,4-Dichlorophenol	610	NC		< 0.20	< 0.18	< 0.22
Diethyl phthalate	1,000,000	2,000		< 0.20	< 0.18	< 0.22
2,4-Dimethylphenol	41,000	NC		< 0.20	< 0.18	< 0.22
Dimethyl phthalate	NC	NC		< 0.20	< 0.18	< 0.22
4,6-Dinitro-2-methylphenol	NC	NC		< 0.39	< 0.35	< 0.42
2,4-Dinitrophenol	410	NC		< 0.98	< 0.88	< 1.1
2,4-Dinitrotoluene	180	NC		< 0.039	< 0.035	< 0.042
2,6-Dinitrotoluene	180	NC		< 0.039	< 0.035	< 0.042
Di-n-butyl phthalate	200,000	2,300		< 0.20	< 0.18	< 0.22
Di-n-octyl phthalate	4,100	10,000		< 0.20	< 0.18	< 0.22
Hexachlorobenzene	78	2.6		< 0.20	< 0.18	< 0.22
Hexachlorobutadiene	NC	NC		< 0.20	< 0.18	< 0.22
Hexachlorocyclopentadiene	14,000	1.1		< 0.20	< 0.18	< 0.22
Hexachloroethane	2,000	NC		< 0.20	< 0.18	< 0.22
Isophorone	410,000	4,600		< 0.20	< 0.18	< 0.22
2-Methylnaphthalene	NC	NC		< 0.20	< 0.18	< 0.22
2-Methylphenol	100,000	NC		< 0.20	< 0.18	< 0.22
4-Methylphenol	NC	NC		< 0.20	< 0.18	< 0.22
2-Nitroaniline	NC	NC		< 0.20	< 0.18	< 0.22
3-Nitroaniline	NC	NC		< 0.20	< 0.18	< 0.22
4-Nitroaniline	NC	NC		< 0.20	< 0.18	< 0.22
2-Nitrophenol	NC	NC		< 0.20	< 0.18	< 0.22
4-Nitrophenol	NC	NC		< 0.39	< 0.35	< 0.42
Nitrobenzene	1,000	9.4		< 0.039	< 0.035	< 0.042
N-Nitrosodi-n-propylamine	18	NC		< 0.039	< 0.035	< 0.042
N-Nitrosodimethylamine	NC	NC		< 0.20	< 0.18	< 0.22
N-Nitrosodiphenylamine	25,000	NC		< 0.039	< 0.035	< 0.042
2, 2'-oxybis(1-Chloropropane)	NC	NC		< 0.20	< 0.18	< 0.22
Pentachlorophenol	520	NC		< 0.039	< 0.035	< 0.042
Phenol	61,000	NC		< 0.20	< 0.18	< 0.22
Pyridine	NC	NC		< 0.79	< 0.71	< 0.86
1,2,4-Trichlorobenzene	2,000	920		< 0.20	< 0.18	< 0.22
2,4,5-Trichlorophenol	200,000	NC		< 0.20	< 0.18	< 0.22
2,4,6-Trichlorophenol	11,000	540		< 0.20	< 0.18	< 0.22

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3c
Soil Analytical Results
PNAs Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample	B-1-0305	B-1-011012	B-2-0204	B-2-010012	B-3-0305
			Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	Depth (ft)	3-5	11-12	2-4	10-12	3-5
PNAs								
Acenaphthene	120,000	NC		0.054	< 0.039	< 0.038	< 0.038	0.038
Acenaphthylene	NC	NC		0.17	< 0.039	< 0.038	< 0.038	0.51
Anthracene	610,000	NC		0.26	< 0.039	0.039	< 0.038	0.43
Benzo(a)anthracene	170	NC		1.1	< 0.039	0.24	< 0.038	2.8
Benzo(a)pyrene	17	NC		1.8	< 0.039	0.21	< 0.038	3.4
Benzo(b)fluoranthene	170	NC		1.1	< 0.039	0.18	< 0.038	2.5
Benzo(g,h,i)perylene	NC	NC		1.3	< 0.039	0.12	< 0.038	1.7
Benzo(k)fluoranthene	1,700	NC		1.3	< 0.039	0.17	< 0.038	2.7
Chrysene	17,000	NC		1.1	< 0.039	0.24	< 0.038	2.8
Dibenzo(a,h)anthracene	17	NC		0.5	< 0.039	0.067	< 0.038	1.1
Fluoranthene	82,000	NC		1.6	< 0.039	0.43	< 0.038	3.6
Fluorene	82,000	NC		0.06	< 0.039	< 0.038	< 0.038	< 0.037
Indeno(1,2,3-cd)pyrene	170	NC		1	< 0.039	0.12	< 0.038	1.8
Naphthalene	4,100	1.8		0.044	< 0.039	< 0.038	< 0.038	0.05
Phenanthrene	NC	NC		0.49	< 0.039	0.15	< 0.038	0.76
Pyrene	61,000	NC		1.8	< 0.039	0.43	< 0.038	3.5

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3c
Soil Analytical Results
PNAs Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample	B-3-010012	B-4-0204	B-4-010012	B-5-0305	B-5-010012
			Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	Depth (ft)	10-12	2-4	10-12	3-5	10-12
PNAs								
Acenaphthene	120,000	NC		< 0.039	< 0.037	< 0.039	0.07	< 0.039
Acenaphthylene	NC	NC		< 0.039	< 0.037	< 0.039	0.044	< 0.039
Anthracene	610,000	NC		< 0.039	< 0.037	< 0.039	0.27	< 0.039
Benzo(a)anthracene	170	NC		< 0.039	< 0.037	< 0.039	1.5	< 0.039
Benzo(a)pyrene	17	NC		< 0.039	< 0.037	< 0.039	1.4	< 0.039
Benzo(b)fluoranthene	170	NC		< 0.039	< 0.037	< 0.039	1.4	< 0.039
Benzo(g,h,i)perylene	NC	NC		< 0.039	< 0.037	< 0.039	0.97	< 0.039
Benzo(k)fluoranthene	1,700	NC		< 0.039	< 0.037	< 0.039	1.2	< 0.039
Chrysene	17,000	NC		< 0.039	< 0.037	< 0.039	1.5	< 0.039
Dibenzo(a,h)anthracene	17	NC		< 0.039	< 0.037	< 0.039	0.44	< 0.039
Fluoranthene	82,000	NC		< 0.039	< 0.037	< 0.039	2.7	< 0.039
Fluorene	82,000	NC		< 0.039	< 0.037	< 0.039	0.061	< 0.039
Indeno(1,2,3-cd)pyrene	170	NC		< 0.039	< 0.037	< 0.039	0.89	< 0.039
Naphthalene	4,100	1.8		< 0.039	< 0.037	< 0.039	< 0.036	< 0.039
Phenanthrene	NC	NC		< 0.039	< 0.037	< 0.039	1.1	< 0.039
Pyrene	61,000	NC		< 0.039	< 0.037	< 0.039	2.3	< 0.039

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3c
Soil Analytical Results
PNAs Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample	B-6-0103	B-6-09011	B-7-0103	B-7-010012	B-8-0103
			Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	Depth (ft)	1-3	9-11	1-3	10-12	1-3
PNAs								
Acenaphthene	120,000	NC		0.12	< 0.039	0.42	< 0.043	0.23
Acenaphthylene	NC	NC		0.081	< 0.039	0.71	< 0.043	0.053
Anthracene	610,000	NC		0.57	< 0.039	1.9	< 0.043	0.79
Benzo(a)anthracene	170	NC		1.3	< 0.039	8.6	0.049	1.8
Benzo(a)pyrene	17	NC		1.2	< 0.039	7.9	0.053	1.8
Benzo(b)fluoranthene	170	NC		1.2	< 0.039	7.4	< 0.043	1.4
Benzo(g,h,i)perylene	NC	NC		0.73	< 0.039	3.8	< 0.043	1.1
Benzo(k)fluoranthene	1,700	NC		1.1	< 0.039	3.8	0.046	1.5
Chrysene	17,000	NC		1.4	< 0.039	8.5	0.051	1.7
Dibenzo(a,h)anthracene	17	NC		0.22	< 0.039	1.2	< 0.043	0.35
Fluoranthene	82,000	NC		3.1	< 0.039	18	0.094	3.5
Fluorene	82,000	NC		0.22	< 0.039	0.6	< 0.043	0.26
Indeno(1,2,3-cd)pyrene	170	NC		0.71	< 0.039	3.6	< 0.043	0.97
Naphthalene	4,100	1.8		0.096	< 0.039	0.27	< 0.043	0.16
Phenanthrene	NC	NC		2.4	< 0.039	9.5	0.061	2.9
Pyrene	61,000	NC		2.4	< 0.039	15	0.08	3.3

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3c
Soil Analytical Results
PNAs Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample	B-8-08010	B-9-0103	B-9-0507	B-10-0103	B-10-0709
			Date	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	Depth (ft)	8-10	1-3	5-7	1-3	7-9
PNAs								
Acenaphthene	120,000	NC		< 0.039	0.074	< 0.042	0.73	< 0.041
Acenaphthylene	NC	NC		< 0.039	0.99	< 0.042	0.76	< 0.041
Anthracene	610,000	NC		< 0.039	0.91	< 0.042	2.9	< 0.041
Benzo(a)anthracene	170	NC		< 0.039	4.1	< 0.042	7	0.088
Benzo(a)pyrene	17	NC		< 0.039	3.9	< 0.042	6.1	0.085
Benzo(b)fluoranthene	170	NC		< 0.039	3.4	< 0.042	5.8	0.067
Benzo(g,h,i)perylene	NC	NC		< 0.039	2.3	< 0.042	3.6	0.06
Benzo(k)fluoranthene	1,700	NC		< 0.039	3.3	< 0.042	5	0.076
Chrysene	17,000	NC		< 0.039	3.7	< 0.042	6.8	0.089
Dibenzo(a,h)anthracene	17	NC		< 0.039	1.1	< 0.042	1.7	< 0.041
Fluoranthene	82,000	NC		< 0.039	6.5	< 0.042	15	0.15
Fluorene	82,000	NC		< 0.039	0.21	< 0.042	1.4	< 0.041
Indeno(1,2,3-cd)pyrene	170	NC		< 0.039	2.3	< 0.042	3.6	0.056
Naphthalene	4,100	1.8		< 0.039	0.14	< 0.042	0.44	< 0.041
Phenanthrene	NC	NC		< 0.039	2.8	< 0.042	12	0.087
Pyrene	61,000	NC		< 0.039	5.8	< 0.042	13	0.15

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3d
Soil Analytical Results
Inorganics and pH Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample Date	B-1-0305	B-1-011012	B-2-0204	B-2-010012	B-3-0305	B-3-010012
Inorganics (mg/kg)	*Ingestion*	*Inhalation*	**Depth (ft)**	08/02/2018 3-5	08/02/2018 11-12	08/02/2018 2-4	08/02/2018 10-12	08/02/2018 3-5	08/02/2018 10-12
Aluminum	NC	NC		5500	NA	NA	NA	NA	11000
Antimony	82	NC		< 2.0	NA	NA	NA	NA	< 2.1
Arsenic	61	25,000		11	5.5	14	11	7.4	6.9
Barium	14,000	870,000		66	28	94	49	39	80
Beryllium	410	44,000		0.71	NA	NA	NA	NA	0.6
Cadmium	200	59,000		0.61	< 0.53	1.5	< 0.49	< 0.49	< 0.53
Calcium	NC	NC		46000	NA	NA	NA	NA	61000
Chromium	4,100	690		12	16	12	20	7.9	22
Cobalt	12,000	NC		7.4	NA	NA	NA	NA	14
Copper	8,200	NC		99	NA	NA	NA	NA	31
Cyanide	4,100	NC		< 0.29	NA	NA	NA	NA	< 0.30
Iron	NC	NC		21000	NA	NA	NA	NA	26000
Lead	700	NC		220	16	100	14	89	16
Magnesium	730,000	NC		21000	NA	NA	NA	NA	30000
Manganese	4,100	8,700		280	NA	NA	NA	NA	430
Mercury	61	0.1		0.36	0.034	0.41	< 0.022	0.78	0.023
Nickel	4,100	440,000		19	NA	NA	NA	NA	38
Potassium	NC	NC		1000	NA	NA	NA	NA	2600
Selenium	1,000	NC		< 0.98	1.8	< 0.99	< 0.99	< 0.98	< 1.1
Silver	1,000	NC		< 0.98	< 1.1	< 0.99	< 0.99	< 0.98	< 1.1
Sodium	NC	NC		400	NA	NA	NA	NA	950
Thallium	160	NC		< 0.98	NA	NA	NA	NA	< 1.1
Vanadium	1,400	NC		19	NA	NA	NA	NA	22
Zinc	61,000	NC		180	NA	NA	NA	NA	58
pH	NC	NC		8.10	7.81	8.38	8.15	8.20	8.35
TCLP (mg/L)									
Lead	NC	NC		NA	NA	NA	NA	NA	NA
SPLP (mg/L)									
Iron	NC	NC		NA	NA	NA	NA	NA	NA
Lead	NC	NC		NA	NA	NA	NA	NA	NA
Manganese	NC	NC		NA	NA	NA	NA	NA	NA
Selenium	NC	NC		NA	< 0.0040	NA	NA	NA	NA

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. [c] = Inhalation Exposure Routes for Mercury excluded under footnote s of the TACO Appendix B Table B of Section 742. Inhalation remediation objective only applies at sites where elemental mercury is a contaminant of concern.

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3d
Soil Analytical Results
Inorganics and pH Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample Date	B-4-0204	B-4-010012	B-5-0305	B-5-010012	B-6-0103	B-6-09011
				08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018	08/02/2018
Inorganics (mg/kg)	*Ingestion*	*Inhalation*	**Depth (ft)**	2-4	10-12	3-5	10-12	1-3	9-11
Aluminum	NC	NC		NA	NA	5500	NA	NA	9000
Antimony	82	NC		NA	NA	< 2.0	NA	NA	< 2.0
Arsenic	61	25,000		3.7	6.7	3.2	4.5	9.2	3.9
Barium	14,000	870,000		41	5.9	95	8.3	270	48
Beryllium	410	44,000		NA	NA	0.53	NA	NA	0.55
Cadmium	200	59,000		< 0.51	< 0.51	< 0.49	< 0.54	0.81	< 0.51
Calcium	NC	NC		NA	NA	150000	NA	NA	62000
Chromium	4,100	690		8.1	4.5	13	6.7	16	18
Cobalt	12,000	NC		NA	NA	2.9	NA	NA	15
Copper	8,200	NC		NA	NA	26	NA	NA	43
Cyanide	4,100	NC		NA	NA	< 0.28	NA	NA	< 0.30
Iron	NC	NC		NA	NA	23000	NA	NA	30000
Lead	700	NC		21	3.4	120	7.5	170	20
Magnesium	730,000	NC		NA	NA	56000	NA	NA	36000
Manganese	4,100	8,700		NA	NA	710	NA	NA	650
Mercury	61	0.1		0.17	< 0.023	0.073	< 0.023	0.43	< 0.022
Nickel	4,100	440,000		NA	NA	10	NA	NA	37
Potassium	NC	NC		NA	NA	700	NA	NA	2000
Selenium	1,000	NC		< 1.0	< 1.0	< 0.99	1.2	1	1.1
Silver	1,000	NC		< 1.0	< 1.0	< 0.99	< 1.1	< 1.0	< 1.0
Sodium	NC	NC		NA	NA	750	NA	NA	140
Thallium	160	NC		NA	NA	< 0.99	NA	NA	< 1.0
Vanadium	1,400	NC		NA	NA	17	NA	NA	20
Zinc	61,000	NC		NA	NA	190	NA	NA	54
pH	NC	NC		8.45	8.15	9.16	8.24	7.92	7.75
TCLP (mg/L)									
Lead	NC	NC		NA	NA	NA	NA	NA	NA
SPLP (mg/L)									
Iron	NC	NC		NA	NA	NA	NA	NA	0.16
Lead	NC	NC		NA	NA	NA	NA	0.011	NA
Manganese	NC	NC		NA	NA	NA	NA	NA	< 0.0040
Selenium	NC	NC		NA	NA	NA	NA	NA	NA

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. [c] = Inhalation Exposure Routes for Mercury excluded under footnote s of the TACO Appendix B Table B of Section 742. Inhalation remediation objective only applies at sites where elemental mercury is a contaminant of concern.

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3d
Soil Analytical Results
Inorganics and pH Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample Date	B-7-0103	B-7-010012	B-8-0103	B-8-08010	B-9-0103	B-9-0507
Inorganics (mg/kg)	*Ingestion*	*Inhalation*	**Depth (ft)**	08/02/2018 1-3	08/02/2018 10-12	08/02/2018 1-3	08/02/2018 8-10	08/02/2018 1-3	08/02/2018 5-7
Aluminum	NC	NC		NA	NA	4900	NA	NA	4400
Antimony	82	NC		NA	NA	< 1.8	NA	NA	< 2.3
Arsenic	61	25,000		9.1	15	5.7	3.4	10	9.6
Barium	14,000	870,000		260	68	95	61	250	18
Beryllium	410	44,000		NA	NA	0.55	NA	NA	< 0.57
Cadmium	200	59,000		0.77	< 0.58	1	< 0.49	0.54	< 0.57
Calcium	NC	NC		NA	NA	73000	NA	NA	32000
Chromium	4,100	690		36	23	12	21	32	10
Cobalt	12,000	NC		NA	NA	5.8	NA	NA	6.4
Copper	8,200	NC		NA	NA	87	NA	NA	18
Cyanide	4,100	NC		NA	NA	< 0.27	NA	NA	< 0.32
Iron	NC	NC		NA	NA	17000	NA	NA	12000
Lead	700	NC		330	93	290	20	2200	26
Magnesium	730,000	NC		NA	NA	35000	NA	NA	18000
Manganese	4,100	8,700		NA	NA	350	NA	NA	250
Mercury	61	0.1		0.27	0.57	0.47	< 0.019	1.5	< 0.020
Nickel	4,100	440,000		NA	NA	17	NA	NA	17
Potassium	NC	NC		NA	NA	800	NA	NA	930
Selenium	1,000	NC		1.4	1.4	1.2	0.99	1.3	1.7
Silver	1,000	NC		< 0.98	< 1.2	< 0.92	< 0.99	< 1.0	< 1.1
Sodium	NC	NC		NA	NA	210	NA	NA	140
Thallium	160	NC		NA	NA	< 0.92	NA	NA	< 1.1
Vanadium	1,400	NC		NA	NA	19	NA	NA	31
Zinc	61,000	NC		NA	NA	130	NA	NA	69
pH	NC	NC		8.18	8.01	7.83	7.35	7.99	7.85
TCLP (mg/L)									
Lead	NC	NC		NA	NA	NA	NA	0.82	NA
SPLP (mg/L)									
Iron	NC	NC		NA	NA	1.1	NA	NA	NA
Lead	NC	NC		NA	NA	0.0096	NA	NA	NA
Manganese	NC	NC		NA	NA	NA	NA	NA	NA
Selenium	NC	NC		NA	NA	NA	NA	NA	< 0.0040

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. [c] = Inhalation Exposure Routes for Mercury excluded under footnote s of the TACO Appendix B Table B of Section 742. Inhalation remediation objective only applies at sites where elemental mercury is a contaminant of concern.

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3d
Soil Analytical Results
Inorganics and pH Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample Date	B-10-0103 08/02/2018	B-10-0709 08/02/2018
Inorganics (mg/kg)	*Ingestion*	*Inhalation*	**Depth (ft)**	1-3	7-9
Aluminum	NC	NC		NA	NA
Antimony	82	NC		NA	NA
Arsenic	61	25,000		9.7	6.3
Barium	14,000	870,000		380	17
Beryllium	410	44,000		NA	NA
Cadmium	200	59,000		1.7	< 0.56
Calcium	NC	NC		NA	NA
Chromium	4,100	690		31	7.1
Cobalt	12,000	NC		NA	NA
Copper	8,200	NC		NA	NA
Cyanide	4,100	NC		NA	NA
Iron	NC	NC		NA	NA
Lead	700	NC		750	34
Magnesium	730,000	NC		NA	NA
Manganese	4,100	8,700		NA	NA
Mercury	61	0.1		0.87	< 0.022
Nickel	4,100	440,000		NA	NA
Potassium	NC	NC		NA	NA
Selenium	1,000	NC		1.4	1.2
Silver	1,000	NC		< 0.96	< 1.1
Sodium	NC	NC		NA	NA
Thallium	160	NC		NA	NA
Vanadium	1,400	NC		NA	NA
Zinc	61,000	NC		NA	NA
pH	NC	NC		8.22	8.01
TCLP (mg/L)					
Lead	NC	NC		NA	NA
SPLP (mg/L)					
Iron	NC	NC		NA	NA
Lead	NC	NC		NA	NA
Manganese	NC	NC		NA	NA
Selenium	NC	NC		NA	NA

NOTES

1. NC = No toxicity criteria for this exposure route
2. NA = Not Analyzed
3. [c] = Inhalation Exposure Routes for Mercury excluded under footnote s of the TACO Appendix B Table B of Section 742. Inhalation remediation objective only applies at sites where elemental mercury is a contaminant of concern.

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3e
Soil Analytical Results
Pesticides, Herbicides, and PCBs Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample	B-1-0305	B-3-010012	B-5-0305
			Date	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	Depth (ft)	3-5	10-12	3-5
Pesticides						
4,4´-DDD	520	NC		< 0.0019	< 0.0019	< 0.0017
4,4´-DDE	370	NC		< 0.0019	< 0.0019	< 0.0017
4,4´-DDT	100	2,100		< 0.0019	< 0.0019	< 0.0017
Aldrin	6.1	9.3		< 0.0019	< 0.0019	< 0.0017
alpha-BHC	20	2.1		< 0.0019	< 0.0019	< 0.0017
alpha-Chlordane	NC	NC		< 0.0019	< 0.0019	< 0.0017
beta-BHC	NC	NC		< 0.0019	< 0.0019	< 0.0017
Chlordane	100	22		< 0.019	< 0.019	< 0.017
delta-BHC	NC	NC		< 0.0019	< 0.0019	< 0.0017
Dieldrin	7.8	3.1		< 0.0019	< 0.0019	< 0.0017
Endosulfan I	1,200	NC		< 0.0019	< 0.0019	< 0.0017
Endosulfan II	1,200	NC		< 0.0019	< 0.0019	< 0.0017
Endosulfan sulfate	NC	NC		< 0.0019	< 0.0019	< 0.0017
Endrin	61	NC		< 0.0019	< 0.0019	< 0.0017
Endrin aldehyde	NC	NC		< 0.0019	< 0.0019	< 0.0017
Endrin ketone	NC	NC		< 0.0019	< 0.0019	< 0.0017
gamma-BHC	96	NC		< 0.0019	< 0.0019	< 0.0017
gamma-Chlordane	NC	NC		< 0.0019	< 0.0019	< 0.0017
Heptachlor	28	16		< 0.0019	< 0.0019	< 0.0017
Heptachlor epoxide	2.7	13		< 0.0019	< 0.0019	< 0.0017
Methoxychlor	1,000	NC		< 0.0019	< 0.0019	< 0.0017
Toxaphene	110	240		< 0.039	< 0.038	< 0.036
PCBs						
Aroclor 1016	NC	NC		< 0.094	< 0.093	< 0.087
Aroclor 1221	NC	NC		< 0.094	< 0.093	< 0.087
Aroclor 1232	NC	NC		< 0.094	< 0.093	< 0.087
Aroclor 1242	NC	NC		< 0.094	< 0.093	< 0.087
Aroclor 1248	NC	NC		< 0.094	< 0.093	< 0.087
Aroclor 1254	NC	NC		< 0.094	< 0.093	0.16
Aroclor 1260	NC	NC		< 0.094	< 0.093	< 0.087
Total PCBs	1	NC		ND	ND	0.16

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. ND = Not Detected at the reporting limit

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

TABLE # 3e
Soil Analytical Results
Pesticides, Herbicides, and PCBs Compared to Construction Worker SROs
EOWA - Contract 4659 - IN02

	CONSTRUCTION WORKER		Sample	B-6-09011	B-8-0103	B-9-0507
			Date	08/02/2018	08/02/2018	08/02/2018
	Ingestion	*Inhalation*	**Depth (ft)**	9-11	1-3	5-7
Pesticides						
4,4´-DDD	520	NC		< 0.0019	< 0.0017	< 0.0020
4,4´-DDE	370	NC		< 0.0019	< 0.0017	< 0.0020
4,4´-DDT	100	2,100		< 0.0019	< 0.0017	< 0.0020
Aldrin	6.1	9.3		< 0.0019	< 0.0017	< 0.0020
alpha-BHC	20	2.1		< 0.0019	< 0.0017	< 0.0020
alpha-Chlordane	NC	NC		< 0.0019	< 0.0017	< 0.0020
beta-BHC	NC	NC		< 0.0019	< 0.0017	< 0.0020
Chlordane	100	22		< 0.019	< 0.017	< 0.020
delta-BHC	NC	NC		< 0.0019	< 0.0017	< 0.0020
Dieldrin	7.8	3.1		< 0.0019	< 0.0017	< 0.0020
Endosulfan I	1,200	NC		< 0.0019	< 0.0017	< 0.0020
Endosulfan II	1,200	NC		< 0.0019	< 0.0017	< 0.0020
Endosulfan sulfate	NC	NC		< 0.0019	< 0.0017	< 0.0020
Endrin	61	NC		< 0.0019	< 0.0017	< 0.0020
Endrin aldehyde	NC	NC		< 0.0019	< 0.0017	< 0.0020
Endrin ketone	NC	NC		< 0.0019	< 0.0017	< 0.0020
gamma-BHC	96	NC		< 0.0019	< 0.0017	< 0.0020
gamma-Chlordane	NC	NC		< 0.0019	< 0.0017	< 0.0020
Heptachlor	28	16		< 0.0019	< 0.0017	< 0.0020
Heptachlor epoxide	2.7	13		< 0.0019	< 0.0017	< 0.0020
Methoxychlor	1,000	NC		< 0.0019	< 0.0017	< 0.0020
Toxaphene	110	240		< 0.039	< 0.035	< 0.042
PCBs						
Aroclor 1016	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1221	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1232	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1242	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1248	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1254	NC	NC		< 0.094	< 0.084	< 0.10
Aroclor 1260	NC	NC		< 0.094	< 0.084	< 0.10
Total PCBs	1	NC		ND	ND	ND

NOTES

1. All results expressed in milligrams per kilogram (mg/kg)
2. NC = No toxicity criteria for this exposure route
3. NA = Not Analyzed
4. ND = Not Detected at the reporting limit

Sample result above TACO Construction Worker Ingestion and/or Inhalation.

APPENDICES

APPENDIX A **Soil Boring Logs**
APPENDIX B **Laboratory Analytical Results**

APPENDIX A

Soil Boring Logs

GSG Consultants, Inc.
623 Cooper Court
Schaumburg, Illinois 60173
Telephone: 312-733-6262
Fax: 312-733-5612

BORING NUMBER B-1

CLIENT Perkins+Will
PROJECT NAME Damen Green Line Elevated CTA Station
PROJECT NUMBER 18-1051
PROJECT LOCATION Chicago, Illinois
DATE STARTED 8/2/18 **COMPLETED** 8/2/18
GROUND ELEVATION 16.12 ft CCD **HOLE SIZE** 3"
DRILLING CONTRACTOR GSG Drilling
GROUND WATER LEVELS:
DRILLING METHOD GeoProbe Dual-Tube (7822DT)
AT TIME OF DRILLING --- None
LOGGED BY TEK **CHECKED BY** EM
AT END OF DRILLING --- NA
NOTES N: 1901371.817 E: 1162738.999
AFTER DRILLING --- NA

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0.0					6 inches of Concrete Sidewalk	
					0.5 — 15.6	
					FILL: GRAVEL - Gray	PID = 0
						PID = 0
2.5	MC 1	50	Sample B-1-0305			PID = 0
					3.0 — 13.1	
					FILL: SAND, trace gravel - Dark Brown and Black	PID = 0
5.0						PID = 0
						PID = 0
						PID = 0
7.5	MC 2	8				PID = 0
						PID = 0
						PID = 0
10.0					10.0 — 6.1	
					FILL: GRAVEL - Gray	PID = 0
	MC 2	100	Sample B-1-011012		11.5 — 4.6	
					SILTY CLAY, trace gravel (CL/ML) - Gray	PID = 0
					12.0 — 4.1	

Bottom of borehole at 12.0 feet.

GENERAL BH / TP / WELL - GINT STD US.GDT - 9/21/18 09:23 - \\GSGFS02\PROJECTS - ENGINEERING\PERKINS+WILL\DAMEN GREEN LINE ELEVATED STATION\PS\FIELD BORING LOGS\BORING LOGS.GPJ

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Schaumburg, Illinois 60173
Telephone: 312-733-6262
Fax: 312-733-5612

BORING NUMBER B-10

CLIENT Perkins+Will
PROJECT NAME Damen Green Line Elevated CTA Station
PROJECT NUMBER 18-1051
PROJECT LOCATION Chicago, Illinois
DATE STARTED 8/2/18 **COMPLETED** 8/2/18
GROUND ELEVATION 15.12 ft CCD **HOLE SIZE** 3"
DRILLING CONTRACTOR GSG Drilling
GROUND WATER LEVELS:
DRILLING METHOD GeoProbe Dual-Tube (7822DT)
AT TIME OF DRILLING --- None
LOGGED BY TEK **CHECKED BY** EM
AT END OF DRILLING --- NA
NOTES N: 1901220.239 E: 1162980.072
AFTER DRILLING --- NA

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0.0					FILL: GRAVEL - Gray	
					0.4 — 14.7	
					FILL: SILTY SAND, with gravel - Dark Brown and Black	PID = 0
	1		Sample B-10-0103			PID = 0
2.5	MC	50				PID = 0
					3.5 — 11.6	
					FILL: SILTY SAND, with brick and wood fragments - Dark Brown	PID = 22.1
5.0						PID = 5.1
						PID = 0
						PID = 0
					7.0 — 8.1	
					SAND (SP) - Brown	
7.5	MC	50				PID = 0
	2		Sample B-10-0709			PID = 0
					9.0 — 6.1	
					SILTY CLAY, trace sand, trace gravel (CL/ML) - Gray	
10.0						PID = 0
						PID = 0
	MC	100				PID = 0
					12.0 — 3.1	

Bottom of borehole at 12.0 feet.

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GSG Consultants, Inc.
623 Cooper Court
Schaumburg, Illinois 60173
Telephone: 312-733-6262
Fax: 312-733-5612

BORING NUMBER B-2

CLIENT Perkins+Will
PROJECT NAME Damen Green Line Elevated CTA Station
PROJECT NUMBER 18-1051
PROJECT LOCATION Chicago, Illinois
DATE STARTED 8/2/18 **COMPLETED** 8/2/18
GROUND ELEVATION 16.12 ft CCD **HOLE SIZE** 3"
DRILLING CONTRACTOR GSG Drilling
GROUND WATER LEVELS:
DRILLING METHOD GeoProbe Dual-Tube (7822DT)
AT TIME OF DRILLING --- None
LOGGED BY TEK **CHECKED BY** EM
AT END OF DRILLING --- NA
NOTES N: 1901383.698 E: 1162958.397
AFTER DRILLING --- NA

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0.0					6 inches of Concrete	
					0.5 — 15.6	
					FILL: GRAVEL - Gray	PID = 0
						PID = 0
					2.0 — 14.1	
					FILL: SILTY SAND, trace gravel - Dark Brown and Black	
2.5	MC 1	63	Sample B-2-0204			PID = 0
						PID = 0
						PID = 0
5.0					5.0 — 11.1	
					FILL: SILTY SAND, with staining - Brown	
						PID = 0
						PID = 0
7.5	MC	8				PID = 0
						PID = 0
						PID = 0
10.0					10.0 — 6.1	
					SILTY CLAY, trace gravel (CL/ML) - Gray	PID = 0
	MC 2	100	Sample B-2-010012			PID = 0
					12.0 — 4.1	

Bottom of borehole at 12.0 feet.

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GSG Consultants, Inc.
623 Cooper Court
Schaumburg, Illinois 60173
Telephone: 312-733-6262
Fax: 312-733-5612

BORING NUMBER B-3

CLIENT Perkins+Will
PROJECT NAME Damen Green Line Elevated CTA Station
PROJECT NUMBER 18-1051
PROJECT LOCATION Chicago, Illinois
DATE STARTED 8/2/18 **COMPLETED** 8/2/18
GROUND ELEVATION 14.12 ft CCD **HOLE SIZE** 3"
DRILLING CONTRACTOR GSG Drilling
GROUND WATER LEVELS:
DRILLING METHOD GeoProbe Dual-Tube (7822DT)
▽ **AT TIME OF DRILLING** 11.00 ft / Elev 3.12 ft
LOGGED BY TEK **CHECKED BY** EM
AT END OF DRILLING --- NA
NOTES N: 1901390.393 E: 1163119.015
AFTER DRILLING --- NA

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0.0					6 inches of Concrete	
					0.5 — 13.6	
					FILL: GRAVEL - Gray	PID = 0
						PID = 0
2.5	MC 1	50	Sample B-3-0305			PID = 0
					3.0 — 11.1	
					FILL: SILTY SAND, with gravel - Dark Brown and Black	PID = 0
5.0						PID = 0
						PID = 0
						PID = 0
7.5	MC	30				PID = 0
					8.0 — 6.1	
					SILTY CLAY, trace gravel (CL/ML) - Brown and Gray	PID = 0
						PID = 0
10.0					10.0 — 4.1	
					SILTY CLAY, trace gravel (CL/ML) - Gray	PID = 0
	MC 2	100	Sample B-3-010012		▽	PID = 0
					12.0 — 2.1	

Bottom of borehole at 12.0 feet.

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GSG Consultants, Inc.
623 Cooper Court
Schaumburg, Illinois 60173
Telephone: 312-733-6262
Fax: 312-733-5612

BORING NUMBER B-4

CLIENT Perkins+Will
PROJECT NAME Damen Green Line Elevated CTA Station
PROJECT NUMBER 18-1051
PROJECT LOCATION Chicago, Illinois
DATE STARTED 8/2/18 **COMPLETED** 8/2/18
GROUND ELEVATION 17.12 ft CCD **HOLE SIZE** 3"
DRILLING CONTRACTOR GSG Drilling
GROUND WATER LEVELS:
DRILLING METHOD GeoProbe Dual-Tube (7822DT)
▽ **AT TIME OF DRILLING** 11.00 ft / Elev 6.12 ft
LOGGED BY TEK **CHECKED BY** EM
AT END OF DRILLING --- NA
NOTES N: 1901318.675 E: 1162747.302
AFTER DRILLING --- NA

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0.0					6 inches of Concrete	
					0.5 — 16.6	
					FILL: GRAVEL - Gray	PID = 0
						PID = 0
					2.0 — 15.1	
					FILL: SAND, trace gravel - Black	
2.5	MC 1	52	Sample B-4-0204			PID = 0
						PID = 0
					4.0 — 13.1	
					FILL: SAND, with staining - Dark Brown	
5.0						PID = 0
						PID = 0
						PID = 0
7.5	MC	17				PID = 0
						PID = 0
						PID = 0
10.0					10.0 — 7.1	
					SAND (SP) - Brown	
	MC 2	100	Sample B-4-010012		▽	PID = 0
						PID = 0
					12.0 — 5.1	

Bottom of borehole at 12.0 feet.

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GSG Consultants, Inc.
623 Cooper Court
Schaumburg, Illinois 60173
Telephone: 312-733-6262
Fax: 312-733-5612

BORING NUMBER B-5

CLIENT Perkins+Will
PROJECT NAME Damen Green Line Elevated CTA Station
PROJECT NUMBER 18-1051
PROJECT LOCATION Chicago, Illinois
DATE STARTED 8/2/18 **COMPLETED** 8/2/18
GROUND ELEVATION 17.12 ft CCD **HOLE SIZE** 3"
DRILLING CONTRACTOR GSG Drilling
GROUND WATER LEVELS:
DRILLING METHOD GeoProbe Dual-Tube (7822DT)
▽ **AT TIME OF DRILLING** 11.00 ft / Elev 6.12 ft
LOGGED BY TEK **CHECKED BY** EM
AT END OF DRILLING --- NA
NOTES N: 1901342.276 E: 1163117.204
AFTER DRILLING --- NA

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0.0					6 inches of Concrete	
					0.5	
					FILL: GRAVEL - Gray	PID = 0
						PID = 0
2.5	MC 1	38	Sample B-5-0305			PID = 0
					3.0	
					FILL: SAND, with gravel - Brown and Gray	PID = 0
5.0						PID = 0
						PID = 0
						PID = 0
7.5	MC 2	8				PID = 0
						PID = 0
						PID = 0
10.0					10.0 7.1	
					SAND (SP) - Brown	PID = 0
	MC 2	100	Sample B-5-010012		▽	PID = 0
					12.0 5.1	

Bottom of borehole at 12.0 feet.

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GSG Consultants, Inc.
623 Cooper Court
Schaumburg, Illinois 60173
Telephone: 312-733-6262
Fax: 312-733-5612

BORING NUMBER B-6

CLIENT Perkins+Will
PROJECT NAME Damen Green Line Elevated CTA Station
PROJECT NUMBER 18-1051
PROJECT LOCATION Chicago, Illinois
DATE STARTED 8/2/18 **COMPLETED** 8/2/18
GROUND ELEVATION 17.12 ft CCD **HOLE SIZE** 3"
DRILLING CONTRACTOR GSG Drilling
GROUND WATER LEVELS:
DRILLING METHOD GeoProbe Dual-Tube (7822DT)
AT TIME OF DRILLING --- None
LOGGED BY TEK **CHECKED BY** EM
AT END OF DRILLING --- NA
NOTES N: 1901295.201 E: 1162918.226
AFTER DRILLING --- NA

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0.0					0.2 2 inches of Gravel 17.0	
					FILL: SILTY SAND, with gravel, trace organics - Dark Brown and Black	PID = 0
	1		Sample B-6-0103			PID = 0
2.5	MC	67				PID = 0
					3.0 14.1	
					FILL: SILTY CLAY, trace gravel - Brown and Gray	PID = 0
5.0						PID = 0
					5.0 12.1	
					FILL: SAND, with brick fragments - Brown	PID = 0
						PID = 0
7.5	MC	67				PID = 0
					8.0 9.1	
					FILL: SILTY CLAY, trace gravel - Brown and Gray	PID = 0
					9.0 8.1	
10.0					SILTY CLAY, trace gravel (CL/ML)	PID = 0
	MC 2	100	Sample B-6-09011			PID = 0
						PID = 0
					12.0 5.1	

Bottom of borehole at 12.0 feet.

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GSG Consultants, Inc.
623 Cooper Court
Schaumburg, Illinois 60173
Telephone: 312-733-6262
Fax: 312-733-5612

BORING NUMBER B-7

CLIENT Perkins+Will
PROJECT NAME Damen Green Line Elevated CTA Station
PROJECT NUMBER 18-1051
PROJECT LOCATION Chicago, Illinois
DATE STARTED 8/2/18 **COMPLETED** 8/2/18
GROUND ELEVATION 16.12 ft CCD **HOLE SIZE** 3"
DRILLING CONTRACTOR GSG Drilling
GROUND WATER LEVELS:
DRILLING METHOD GeoProbe Dual-Tube (7822DT)
AT TIME OF DRILLING --- None
LOGGED BY TEK **CHECKED BY** EM
AT END OF DRILLING --- NA
NOTES N: 1901296.352 E: 1162973.498
AFTER DRILLING --- NA

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0.0					0.2 FILL: GRAVEL - Gray 16.0	
					FILL: SILTY SAND, with gravel - Brown	PID = 0
	1		Sample B-7-0103			PID = 0
2.5	MC	30				PID = 0
					4.0 12.1	PID = 0
					FILL: GRAVEL - Gray	
5.0					5.0 11.1	PID = 0
					FILL: SILTY SAND, with wood fragments - Brown and Gray	PID = 0
						PID = 0
7.5	MC	30				PID = 0
					8.0 8.1	
					FILL: SILTY CLAY, trace gravel - Brown and Gray	PID = 0
					9.5 6.6	
					FILL: CRUSHED RED BRICK	PID = 0
10.0					10.0 6.1	
					SILTY CLAY, trace gravel (CL/ML) - Brown and Gray	PID = 0
	MC 2	75	Sample B-7-010012			PID = 0
					12.0 4.1	

Bottom of borehole at 12.0 feet.

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GSG Consultants, Inc.
623 Cooper Court
Schaumburg, Illinois 60173
Telephone: 312-733-6262
Fax: 312-733-5612

BORING NUMBER B-8

CLIENT Perkins+Will
PROJECT NAME Damen Green Line Elevated CTA Station
PROJECT NUMBER 18-1051
PROJECT LOCATION Chicago, Illinois
DATE STARTED 8/2/18 **COMPLETED** 8/2/18
GROUND ELEVATION 15.12 ft CCD **HOLE SIZE** 3"
DRILLING CONTRACTOR GSG Drilling
GROUND WATER LEVELS:
DRILLING METHOD GeoProbe Dual-Tube (7822DT)
AT TIME OF DRILLING --- None
LOGGED BY TEK **CHECKED BY** EM
AT END OF DRILLING --- NA
NOTES N: 1901249.441 E: 1162938.728
AFTER DRILLING --- NA

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0.0					0.3 FILL: GRAVEL - Gray 14.8	
					FILL: SILTY CLAY, with gravel - Dark Brown and Black	PID = 0
	1		Sample B-8-0103			PID = 0
2.5	MC	75			3.0 12.1	PID = 0
					FILL: GRAVEL - Gray	
					4.0 11.1	PID = 0
					FILL: SILTY CLAY, brick and wood fragments - Dark Brown and Black	
5.0						PID = 0
					6.5 8.6	PID = 0
					FILL: SILTY CLAY, trace gravel - Brown	
7.5	MC	75			7.5 7.6	PID = 0
					SILTY CLAY, trace sand, trace gravel (CL/ML) - Gray	PID = 0
	2		Sample B-8-08010			PID = 0
10.0						PID = 0
	MC	100				PID = 0
					12.0 3.1	PID = 0

Bottom of borehole at 12.0 feet.

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GSG Consultants, Inc.
623 Cooper Court
Schaumburg, Illinois 60173
Telephone: 312-733-6262
Fax: 312-733-5612

BORING NUMBER B-9

CLIENT Perkins+Will
PROJECT NAME Damen Green Line Elevated CTA Station
PROJECT NUMBER 18-1051
PROJECT LOCATION Chicago, Illinois
DATE STARTED 8/2/18 **COMPLETED** 8/2/18
GROUND ELEVATION 15.12 ft CCD **HOLE SIZE** 3"
DRILLING CONTRACTOR GSG Drilling
GROUND WATER LEVELS:
DRILLING METHOD GeoProbe Dual-Tube (7822DT)
AT TIME OF DRILLING --- None
LOGGED BY TEK **CHECKED BY** EM
AT END OF DRILLING --- NA
NOTES N: 1901198.36 E: 1162930.676
AFTER DRILLING --- NA

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY %	REMARKS	GRAPHIC LOG	MATERIAL DESCRIPTION	Environmental Data
0.0					FILL: GRAVEL - Gray	
					0.4 — 14.7	
					FILL: SILTY CLAY, with gravel - Dark Brown and Black	PID = 0
	1		Sample B-9-0103			PID = 0
2.5	MC	75				PID = 0
						PID = 0
5.0					5.0 — 10.1	PID = 0
					SAND (SP) - Brown	
	2		Sample B-9-0507			PID = 0
						PID = 0
7.5	MC	100			7.5 — 7.6	
					SILTY CLAY, trace sand, trace gravel (CL/ML) - Gray	PID = 0
						PID = 0
10.0						PID = 0
						PID = 0
	MC	100				PID = 0
					12.0 — 3.1	

Bottom of borehole at 12.0 feet.

GENERAL BH / TP / WELL - GINT STD US.GDT - 9/21/18 09:24 - \\GSGFS02\PROJECTS - ENGINEERING\PERKINS+WILL\DAMEN GREEN LINE ELEVATED STATION\PS\FIELD BORING LOGS\BORING LOGS.GPJ

APPENDIX B

Laboratory Analytical Results

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditations: IEPA ELAP 100445; ORELAP IL300001; AIHA-LAP, LLC 101160; NVLAP LabCode 101202-0

August 23, 2018

GSG Consultants, Inc.
2942 W. Van Buren St.
Chicago, IL 60612
Telephone: (312) 733-6262
Fax: (312) 733-5612

Analytical Report for STAT Work Order: 18080086 Revision 1

RE: Damen & Lake, Chicago, IL

Dear Ted Cagney:

STAT Analysis received 20 samples for the referenced project on 8/2/2018 2:55:00 PM. The analytical results are presented in the following report.

This report is revised to reflect additional analysis requested after the last report revision.

All analyses were performed in accordance with the requirements of 35 IAC Part 186 / NELAP standards. Analyses were performed in accordance with methods as referenced on the analytical report. Those analytical results expressed on a dry weight basis are also noted on the analytical report.

All analyses were performed within established holding time criteria, and all Quality Control criteria met EPA or laboratory specifications except when noted in the Case Narrative or Analytical Report. If required, an estimate of uncertainty for the analyses can be provided. A listing of accredited methods/parameters can also be provided.

Thank you for the opportunity to serve you and I look forward to working with you in the future. If you have any questions regarding the enclosed materials, please contact me at (312) 733-0551.

Sincerely,

Justice Kwateng
Project Manager

The information contained in this report and any attachments is confidential information intended only for the use of the individual or entities named above. The results of this report relate only to the samples tested. If you have received this report in error, please notify us immediately by phone. This report shall not be reproduced, except in its entirety, unless written approval has been obtained from the laboratory. This analytical report shall become property of the Customer upon payment in full. Otherwise, STAT will be under no obligation to support, defend or discuss the analytical report.

Client: GSG Consultants, Inc.
Project: Damen & Lake, Chicago, IL
Work Order: 18080086 Revision 1

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Tag Number	Collection Date	Date Received
18080086-001A	B-1-0305		8/2/2018	8/2/2018
18080086-001B	B-1-0305		8/2/2018	8/2/2018
18080086-002A	B-1-011012		8/2/2018	8/2/2018
18080086-003A	B-2-0204		8/2/2018	8/2/2018
18080086-004A	B-2-010012		8/2/2018	8/2/2018
18080086-005A	B-3-0305		8/2/2018	8/2/2018
18080086-006A	B-3-010012		8/2/2018	8/2/2018
18080086-006B	B-3-010012		8/2/2018	8/2/2018
18080086-007A	B-4-0204		8/2/2018	8/2/2018
18080086-008A	B-4-010012		8/2/2018	8/2/2018
18080086-009A	B-5-0305		8/2/2018	8/2/2018
18080086-009B	B-5-0305		8/2/2018	8/2/2018
18080086-010A	B-5-010012		8/2/2018	8/2/2018
18080086-011A	B-6-0103		8/2/2018	8/2/2018
18080086-012A	B-6-09011		8/2/2018	8/2/2018
18080086-012B	B-6-09011		8/2/2018	8/2/2018
18080086-013A	B-7-0103		8/2/2018	8/2/2018
18080086-014A	B-7-010012		8/2/2018	8/2/2018
18080086-015A	B-8-0103		8/2/2018	8/2/2018
18080086-015B	B-8-0103		8/2/2018	8/2/2018
18080086-016A	B-8-08010		8/2/2018	8/2/2018
18080086-017A	B-9-0103		8/2/2018	8/2/2018
18080086-018A	B-9-0507		8/2/2018	8/2/2018
18080086-018B	B-9-0507		8/2/2018	8/2/2018
18080086-019A	B-10-0103		8/2/2018	8/2/2018
18080086-020A	B-10-0709		8/2/2018	8/2/2018

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-001

Client Sample ID: B-1-0305
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/2/2018**		Analyst: **AET**
Acetone	ND	0.12		mg/Kg-dry	1	8/7/2018
Benzene	ND	0.0077		mg/Kg-dry	1	8/7/2018
Bromodichloromethane	ND	0.0077		mg/Kg-dry	1	8/7/2018
Bromoform	ND	0.0077		mg/Kg-dry	1	8/7/2018
Bromomethane	ND	0.015		mg/Kg-dry	1	8/7/2018
2-Butanone	ND	0.12		mg/Kg-dry	1	8/7/2018
Carbon disulfide	ND	0.077		mg/Kg-dry	1	8/7/2018
Carbon tetrachloride	ND	0.0077		mg/Kg-dry	1	8/7/2018
Chlorobenzene	ND	0.0077		mg/Kg-dry	1	8/7/2018
Chloroethane	ND	0.015		mg/Kg-dry	1	8/7/2018
Chloroform	ND	0.0077		mg/Kg-dry	1	8/7/2018
Chloromethane	ND	0.015		mg/Kg-dry	1	8/7/2018
Dibromochloromethane	ND	0.0077		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethane	ND	0.0077		mg/Kg-dry	1	8/7/2018
1,2-Dichloroethane	ND	0.0077		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethene	ND	0.0077		mg/Kg-dry	1	8/7/2018
cis-1,2-Dichloroethene	ND	0.0077		mg/Kg-dry	1	8/7/2018
trans-1,2-Dichloroethene	ND	0.0077		mg/Kg-dry	1	8/7/2018
1,2-Dichloropropane	ND	0.0077		mg/Kg-dry	1	8/7/2018
cis-1,3-Dichloropropene	ND	0.0031		mg/Kg-dry	1	8/7/2018
trans-1,3-Dichloropropene	ND	0.0031		mg/Kg-dry	1	8/7/2018
Ethylbenzene	ND	0.0077		mg/Kg-dry	1	8/7/2018
2-Hexanone	ND	0.031		mg/Kg-dry	1	8/7/2018
4-Methyl-2-pentanone	ND	0.031		mg/Kg-dry	1	8/7/2018
Methylene chloride	ND	0.015		mg/Kg-dry	1	8/7/2018
Methyl tert-butyl ether	ND	0.0077		mg/Kg-dry	1	8/7/2018
Styrene	ND	0.0077		mg/Kg-dry	1	8/7/2018
1,1,2,2-Tetrachloroethane	ND	0.0077		mg/Kg-dry	1	8/7/2018
Tetrachloroethene	ND	0.0077		mg/Kg-dry	1	8/7/2018
Toluene	ND	0.0077		mg/Kg-dry	1	8/7/2018
1,1,1-Trichloroethane	ND	0.0077		mg/Kg-dry	1	8/7/2018
1,1,2-Trichloroethane	ND	0.0077		mg/Kg-dry	1	8/7/2018
Trichloroethene	ND	0.0077		mg/Kg-dry	1	8/7/2018
Vinyl chloride	ND	0.0077		mg/Kg-dry	1	8/7/2018
Xylenes, Total	ND	0.023		mg/Kg-dry	1	8/7/2018
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **DM**
Acenaphthene	0.054	0.038		mg/Kg-dry	1	8/9/2018
Acenaphthylene	0.17	0.038		mg/Kg-dry	1	8/9/2018

Qualifiers:
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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-001

Client Sample ID: B-1-0305
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**		Prep Date: **8/9/2018**		Analyst: **DM**	
Aniline	ND	0.39		mg/Kg-dry	1	8/9/2018
Anthracene	0.26	0.038		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	1.1	0.038		mg/Kg-dry	1	8/9/2018
Benzidine	ND	0.38		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	1.8	0.038		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	1.1	0.038		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	1.3	0.038		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	1.3	0.038		mg/Kg-dry	1	8/9/2018
Benzoic acid	ND	0.96		mg/Kg-dry	1	8/9/2018
Benzyl alcohol	ND	0.20		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg-dry	1	8/9/2018
Bis(2-ethylhexyl)phthalate	ND	0.96		mg/Kg-dry	1	8/9/2018
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg-dry	1	8/9/2018
Butyl benzyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
Carbazole	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Chloroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Chloro-3-methylphenol	ND	0.38		mg/Kg-dry	1	8/9/2018
2-Chloronaphthalene	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Chlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg-dry	1	8/9/2018
Chrysene	1.1	0.038		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	0.50	0.038		mg/Kg-dry	1	8/9/2018
Dibenzofuran	ND	0.20		mg/Kg-dry	1	8/9/2018
1,2-Dichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
1,3-Dichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
1,4-Dichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
3,3´-Dichlorobenzidine	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4-Dichlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Diethyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4-Dimethylphenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Dimethyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
4,6-Dinitro-2-methylphenol	ND	0.38		mg/Kg-dry	1	8/9/2018
2,4-Dinitrophenol	ND	0.96		mg/Kg-dry	1	8/9/2018
2,4-Dinitrotoluene	ND	0.038		mg/Kg-dry	1	8/9/2018
2,6-Dinitrotoluene	ND	0.038		mg/Kg-dry	1	8/9/2018
Di-n-butyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
Di-n-octyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-001

Client Sample ID: B-1-0305
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**		Prep Date: **8/9/2018**			Analyst: **DM**
Fluoranthene	1.6	0.038		mg/Kg-dry	1	8/9/2018
Fluorene	0.060	0.038		mg/Kg-dry	1	8/9/2018
Hexachlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
Hexachlorobutadiene	ND	0.20		mg/Kg-dry	1	8/9/2018
Hexachlorocyclopentadiene	ND	0.20		mg/Kg-dry	1	8/9/2018
Hexachloroethane	ND	0.20		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	1.0	0.038		mg/Kg-dry	1	8/9/2018
Isophorone	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Methylnaphthalene	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Methylphenol	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Methylphenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Naphthalene	0.044	0.038		mg/Kg-dry	1	8/9/2018
2-Nitroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
3-Nitroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Nitroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Nitrophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Nitrophenol	ND	0.38		mg/Kg-dry	1	8/9/2018
Nitrobenzene	ND	0.038		mg/Kg-dry	1	8/9/2018
N-Nitrosodi-n-propylamine	ND	0.038		mg/Kg-dry	1	8/9/2018
N-Nitrosodimethylamine	ND	0.20		mg/Kg-dry	1	8/9/2018
N-Nitrosodiphenylamine	ND	0.038		mg/Kg-dry	1	8/9/2018
2, 2'-oxybis(1-Chloropropane)	ND	0.20		mg/Kg-dry	1	8/9/2018
Pentachlorophenol	ND	0.038		mg/Kg-dry	1	8/9/2018
Phenanthrene	0.49	0.038		mg/Kg-dry	1	8/9/2018
Phenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Pyrene	1.8	0.038		mg/Kg-dry	1	8/9/2018
Pyridine	ND	0.78		mg/Kg-dry	1	8/9/2018
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4,5-Trichlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4,6-Trichlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
PCBs	**SW8082A (SW3550B)**		Prep Date: **8/6/2018**			Analyst: **GVC**
Aroclor 1016	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1221	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1232	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1242	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1248	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1254	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1260	ND	0.094		mg/Kg-dry	1	8/7/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-001

Client Sample ID: B-1-0305
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Pesticides		**SW8081B (SW3550B)**		Prep Date: **8/6/2018**		Analyst: **GVC**
4,4´-DDD	ND	0.0019		mg/Kg-dry	1	8/7/2018
4,4´-DDE	ND	0.0019		mg/Kg-dry	1	8/7/2018
4,4´-DDT	ND	0.0019		mg/Kg-dry	1	8/7/2018
Aldrin	ND	0.0019		mg/Kg-dry	1	8/7/2018
alpha-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
alpha-Chlordane	ND	0.0019		mg/Kg-dry	1	8/7/2018
beta-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
Chlordane	ND	0.019		mg/Kg-dry	1	8/7/2018
delta-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
Dieldrin	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endosulfan I	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endosulfan II	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endosulfan sulfate	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endrin	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endrin aldehyde	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endrin ketone	ND	0.0019		mg/Kg-dry	1	8/7/2018
gamma-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
gamma-Chlordane	ND	0.0019		mg/Kg-dry	1	8/7/2018
Heptachlor	ND	0.0019		mg/Kg-dry	1	8/7/2018
Heptachlor epoxide	ND	0.0019		mg/Kg-dry	1	8/7/2018
Methoxychlor	ND	0.0019		mg/Kg-dry	1	8/7/2018
Toxaphene	ND	0.039		mg/Kg-dry	1	8/7/2018
Metals by ICP/MS		**SW6020A (SW3050B)**		Prep Date: **8/6/2018**		Analyst: **MDT**
Aluminum	5500	20		mg/Kg-dry	10	8/6/2018
Antimony	ND	2.0		mg/Kg-dry	10	8/7/2018
Arsenic	11	0.98		mg/Kg-dry	10	8/6/2018
Barium	66	0.98		mg/Kg-dry	10	8/6/2018
Beryllium	0.71	0.49		mg/Kg-dry	10	8/6/2018
Cadmium	0.61	0.49		mg/Kg-dry	10	8/6/2018
Calcium	46000	59		mg/Kg-dry	10	8/6/2018
Chromium	12	0.98		mg/Kg-dry	10	8/6/2018
Cobalt	7.4	0.98		mg/Kg-dry	10	8/6/2018
Copper	99	2.5		mg/Kg-dry	10	8/6/2018
Iron	21000	29		mg/Kg-dry	10	8/6/2018
Lead	220	0.49		mg/Kg-dry	10	8/6/2018
Magnesium	21000	29		mg/Kg-dry	10	8/6/2018
Manganese	280	0.98		mg/Kg-dry	10	8/6/2018
Nickel	19	0.98		mg/Kg-dry	10	8/6/2018

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Date Reported: August 23, 2018
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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-001

Client Sample ID: B-1-0305
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Potassium	1000	29		mg/Kg-dry	10	8/6/2018
Selenium	ND	0.98		mg/Kg-dry	10	8/6/2018
Silver	ND	0.98		mg/Kg-dry	10	8/6/2018
Sodium	400	59		mg/Kg-dry	10	8/6/2018
Thallium	ND	0.98		mg/Kg-dry	10	8/6/2018
Vanadium	19	0.98		mg/Kg-dry	10	8/6/2018
Zinc	180	4.9		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.36	0.023		mg/Kg-dry	1	8/6/2018
Cyanide, Total	**SW9012A**			Prep Date: **8/7/2018**		Analyst: **MD**
Cyanide	ND	0.29		mg/Kg-dry	1	8/7/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.10			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **RW**
Percent Moisture	15.1	0.2	*	wt%	1	8/6/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-002

Client Sample ID: B-1-011012
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **DM**
Acenaphthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.039		mg/Kg-dry	1	8/9/2018
Anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Chrysene	ND	0.039		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.039		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.039		mg/Kg-dry	1	8/9/2018
Phenanthrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	5.5	1.1		mg/Kg-dry	10	8/6/2018
Barium	28	1.1		mg/Kg-dry	10	8/6/2018
Cadmium	ND	0.53		mg/Kg-dry	10	8/6/2018
Chromium	16	1.1		mg/Kg-dry	10	8/6/2018
Lead	16	0.53		mg/Kg-dry	10	8/6/2018
Selenium	1.8	1.1		mg/Kg-dry	10	8/6/2018
Silver	ND	1.1		mg/Kg-dry	10	8/6/2018
SPLP Metals by ICP/MS	**SW1312/6020A (SW3005A)**			Prep Date: **8/21/2018**		Analyst: **JG**
Selenium	ND	0.0040		mg/L	2	8/22/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.034	0.022		mg/Kg-dry	1	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	7.81			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **RW**
Percent Moisture	16.6	0.2	*	wt%	1	8/6/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-003

Client Sample ID: B-2-0204
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **DM**
Acenaphthene	ND	0.038		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.038		mg/Kg-dry	1	8/9/2018
Anthracene	0.039	0.038		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	0.24	0.038		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	0.21	0.038		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	0.18	0.038		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	0.12	0.038		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	0.17	0.038		mg/Kg-dry	1	8/9/2018
Chrysene	0.24	0.038		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	0.067	0.038		mg/Kg-dry	1	8/9/2018
Fluoranthene	0.43	0.038		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.038		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	0.12	0.038		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.038		mg/Kg-dry	1	8/9/2018
Phenanthrene	0.15	0.038		mg/Kg-dry	1	8/9/2018
Pyrene	0.43	0.038		mg/Kg-dry	1	8/9/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	14	0.99		mg/Kg-dry	10	8/6/2018
Barium	94	0.99		mg/Kg-dry	10	8/6/2018
Cadmium	1.5	0.50		mg/Kg-dry	10	8/6/2018
Chromium	12	0.99		mg/Kg-dry	10	8/6/2018
Lead	100	0.50		mg/Kg-dry	10	8/6/2018
Selenium	ND	0.99		mg/Kg-dry	10	8/6/2018
Silver	ND	0.99		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.41	0.021		mg/Kg-dry	1	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.38			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **RW**
Percent Moisture	14.1	0.2	*	wt%	1	8/6/2018

Qualifiers:
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STAT Analysis Corporation
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Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-004

Client Sample ID: B-2-010012
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **DM**
Acenaphthene	ND	0.038		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.038		mg/Kg-dry	1	8/9/2018
Anthracene	ND	0.038		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	ND	0.038		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	ND	0.038		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	ND	0.038		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	ND	0.038		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	ND	0.038		mg/Kg-dry	1	8/9/2018
Chrysene	ND	0.038		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	ND	0.038		mg/Kg-dry	1	8/9/2018
Fluoranthene	ND	0.038		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.038		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	ND	0.038		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.038		mg/Kg-dry	1	8/9/2018
Phenanthrene	ND	0.038		mg/Kg-dry	1	8/9/2018
Pyrene	ND	0.038		mg/Kg-dry	1	8/9/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	11	0.99		mg/Kg-dry	10	8/6/2018
Barium	49	0.99		mg/Kg-dry	10	8/6/2018
Cadmium	ND	0.49		mg/Kg-dry	10	8/6/2018
Chromium	20	0.99		mg/Kg-dry	10	8/6/2018
Lead	14	0.49		mg/Kg-dry	10	8/6/2018
Selenium	ND	0.99		mg/Kg-dry	10	8/6/2018
Silver	ND	0.99		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	ND	0.022		mg/Kg-dry	1	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.15			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **RW**
Percent Moisture	14.7	0.2	*	wt%	1	8/6/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-005

Client Sample ID: B-3-0305
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **DM**
Acenaphthene	0.038	0.037		mg/Kg-dry	1	8/9/2018
Acenaphthylene	0.51	0.037		mg/Kg-dry	1	8/9/2018
Anthracene	0.43	0.037		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	2.8	0.037		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	3.4	0.037		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	2.5	0.037		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	1.7	0.037		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	2.7	0.037		mg/Kg-dry	1	8/9/2018
Chrysene	2.8	0.037		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	1.1	0.037		mg/Kg-dry	1	8/9/2018
Fluoranthene	3.6	0.037		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.037		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	1.8	0.037		mg/Kg-dry	1	8/9/2018
Naphthalene	0.050	0.037		mg/Kg-dry	1	8/9/2018
Phenanthrene	0.76	0.037		mg/Kg-dry	1	8/9/2018
Pyrene	3.5	0.037		mg/Kg-dry	1	8/9/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	7.4	0.98		mg/Kg-dry	10	8/6/2018
Barium	39	0.98		mg/Kg-dry	10	8/6/2018
Cadmium	ND	0.49		mg/Kg-dry	10	8/6/2018
Chromium	7.9	0.98		mg/Kg-dry	10	8/6/2018
Lead	89	0.49		mg/Kg-dry	10	8/6/2018
Selenium	ND	0.98		mg/Kg-dry	10	8/6/2018
Silver	ND	0.98		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.78	0.041		mg/Kg-dry	2	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.20			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **RW**
Percent Moisture	11.1	0.2	*	wt%	1	8/6/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-006

Client Sample ID: B-3-010012
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/2/2018**		Analyst: **AET**
Acetone	ND	0.073		mg/Kg-dry	1	8/7/2018
Benzene	ND	0.0049		mg/Kg-dry	1	8/7/2018
Bromodichloromethane	ND	0.0049		mg/Kg-dry	1	8/7/2018
Bromoform	ND	0.0049		mg/Kg-dry	1	8/7/2018
Bromomethane	ND	0.0098		mg/Kg-dry	1	8/7/2018
2-Butanone	ND	0.073		mg/Kg-dry	1	8/7/2018
Carbon disulfide	ND	0.049		mg/Kg-dry	1	8/7/2018
Carbon tetrachloride	ND	0.0049		mg/Kg-dry	1	8/7/2018
Chlorobenzene	ND	0.0049		mg/Kg-dry	1	8/7/2018
Chloroethane	ND	0.0098		mg/Kg-dry	1	8/7/2018
Chloroform	ND	0.0049		mg/Kg-dry	1	8/7/2018
Chloromethane	ND	0.0098		mg/Kg-dry	1	8/7/2018
Dibromochloromethane	ND	0.0049		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethane	ND	0.0049		mg/Kg-dry	1	8/7/2018
1,2-Dichloroethane	ND	0.0049		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethene	ND	0.0049		mg/Kg-dry	1	8/7/2018
cis-1,2-Dichloroethene	ND	0.0049		mg/Kg-dry	1	8/7/2018
trans-1,2-Dichloroethene	ND	0.0049		mg/Kg-dry	1	8/7/2018
1,2-Dichloropropane	ND	0.0049		mg/Kg-dry	1	8/7/2018
cis-1,3-Dichloropropene	ND	0.0020		mg/Kg-dry	1	8/7/2018
trans-1,3-Dichloropropene	ND	0.0020		mg/Kg-dry	1	8/7/2018
Ethylbenzene	ND	0.0049		mg/Kg-dry	1	8/7/2018
2-Hexanone	ND	0.020		mg/Kg-dry	1	8/7/2018
4-Methyl-2-pentanone	ND	0.020		mg/Kg-dry	1	8/7/2018
Methylene chloride	ND	0.0098		mg/Kg-dry	1	8/7/2018
Methyl tert-butyl ether	ND	0.0049		mg/Kg-dry	1	8/7/2018
Styrene	ND	0.0049		mg/Kg-dry	1	8/7/2018
1,1,2,2-Tetrachloroethane	ND	0.0049		mg/Kg-dry	1	8/7/2018
Tetrachloroethene	ND	0.0049		mg/Kg-dry	1	8/7/2018
Toluene	ND	0.0049		mg/Kg-dry	1	8/7/2018
1,1,1-Trichloroethane	ND	0.0049		mg/Kg-dry	1	8/7/2018
1,1,2-Trichloroethane	ND	0.0049		mg/Kg-dry	1	8/7/2018
Trichloroethene	ND	0.0049		mg/Kg-dry	1	8/7/2018
Vinyl chloride	0.011	0.0049		mg/Kg-dry	1	8/7/2018
Xylenes, Total	ND	0.015		mg/Kg-dry	1	8/7/2018
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **DM**
Acenaphthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.039		mg/Kg-dry	1	8/9/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-006

Client Sample ID: B-3-010012
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**		Prep Date: **8/9/2018**		Analyst: **DM**	
Aniline	ND	0.39		mg/Kg-dry	1	8/9/2018
Anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzidine	ND	0.39		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzoic acid	ND	0.98		mg/Kg-dry	1	8/9/2018
Benzyl alcohol	ND	0.20		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg-dry	1	8/9/2018
Bis(2-ethylhexyl)phthalate	ND	0.98		mg/Kg-dry	1	8/9/2018
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg-dry	1	8/9/2018
Butyl benzyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
Carbazole	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Chloroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Chloro-3-methylphenol	ND	0.39		mg/Kg-dry	1	8/9/2018
2-Chloronaphthalene	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Chlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg-dry	1	8/9/2018
Chrysene	ND	0.039		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Dibenzofuran	ND	0.20		mg/Kg-dry	1	8/9/2018
1,2-Dichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
1,3-Dichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
1,4-Dichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
3,3´-Dichlorobenzidine	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4-Dichlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Diethyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4-Dimethylphenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Dimethyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
4,6-Dinitro-2-methylphenol	ND	0.39		mg/Kg-dry	1	8/9/2018
2,4-Dinitrophenol	ND	0.98		mg/Kg-dry	1	8/9/2018
2,4-Dinitrotoluene	ND	0.039		mg/Kg-dry	1	8/9/2018
2,6-Dinitrotoluene	ND	0.039		mg/Kg-dry	1	8/9/2018
Di-n-butyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
Di-n-octyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-006

Client Sample ID: B-3-010012
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **DM**
Fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.039		mg/Kg-dry	1	8/9/2018
Hexachlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
Hexachlorobutadiene	ND	0.20		mg/Kg-dry	1	8/9/2018
Hexachlorocyclopentadiene	ND	0.20		mg/Kg-dry	1	8/9/2018
Hexachloroethane	ND	0.20		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Isophorone	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Methylnaphthalene	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Methylphenol	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Methylphenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.039		mg/Kg-dry	1	8/9/2018
2-Nitroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
3-Nitroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Nitroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Nitrophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Nitrophenol	ND	0.39		mg/Kg-dry	1	8/9/2018
Nitrobenzene	ND	0.039		mg/Kg-dry	1	8/9/2018
N-Nitrosodi-n-propylamine	ND	0.039		mg/Kg-dry	1	8/9/2018
N-Nitrosodimethylamine	ND	0.20		mg/Kg-dry	1	8/9/2018
N-Nitrosodiphenylamine	ND	0.039		mg/Kg-dry	1	8/9/2018
2, 2'-oxybis(1-Chloropropane)	ND	0.20		mg/Kg-dry	1	8/9/2018
Pentachlorophenol	ND	0.039		mg/Kg-dry	1	8/9/2018
Phenanthrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Phenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Pyridine	ND	0.79		mg/Kg-dry	1	8/9/2018
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4,5-Trichlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4,6-Trichlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
PCBs	**SW8082A (SW3550B)**			Prep Date: **8/6/2018**		Analyst: **GVC**
Aroclor 1016	ND	0.093		mg/Kg-dry	1	8/7/2018
Aroclor 1221	ND	0.093		mg/Kg-dry	1	8/7/2018
Aroclor 1232	ND	0.093		mg/Kg-dry	1	8/7/2018
Aroclor 1242	ND	0.093		mg/Kg-dry	1	8/7/2018
Aroclor 1248	ND	0.093		mg/Kg-dry	1	8/7/2018
Aroclor 1254	ND	0.093		mg/Kg-dry	1	8/7/2018
Aroclor 1260	ND	0.093		mg/Kg-dry	1	8/7/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-006

Client Sample ID: B-3-010012
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Pesticides		**SW8081B (SW3550B)**		Prep Date: **8/6/2018**		Analyst: **GVC**
4,4´-DDD	ND	0.0019		mg/Kg-dry	1	8/7/2018
4,4´-DDE	ND	0.0019		mg/Kg-dry	1	8/7/2018
4,4´-DDT	ND	0.0019		mg/Kg-dry	1	8/7/2018
Aldrin	ND	0.0019		mg/Kg-dry	1	8/7/2018
alpha-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
alpha-Chlordane	ND	0.0019		mg/Kg-dry	1	8/7/2018
beta-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
Chlordane	ND	0.019		mg/Kg-dry	1	8/7/2018
delta-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
Dieldrin	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endosulfan I	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endosulfan II	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endosulfan sulfate	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endrin	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endrin aldehyde	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endrin ketone	ND	0.0019		mg/Kg-dry	1	8/7/2018
gamma-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
gamma-Chlordane	ND	0.0019		mg/Kg-dry	1	8/7/2018
Heptachlor	ND	0.0019		mg/Kg-dry	1	8/7/2018
Heptachlor epoxide	ND	0.0019		mg/Kg-dry	1	8/7/2018
Methoxychlor	ND	0.0019		mg/Kg-dry	1	8/7/2018
Toxaphene	ND	0.038		mg/Kg-dry	1	8/7/2018
Metals by ICP/MS		**SW6020A (SW3050B)**		Prep Date: **8/6/2018**		Analyst: **MDT**
Aluminum	11000	21		mg/Kg-dry	10	8/6/2018
Antimony	ND	2.1		mg/Kg-dry	10	8/7/2018
Arsenic	6.9	1.1		mg/Kg-dry	10	8/6/2018
Barium	80	1.1		mg/Kg-dry	10	8/6/2018
Beryllium	0.60	0.53		mg/Kg-dry	10	8/7/2018
Cadmium	ND	0.53		mg/Kg-dry	10	8/6/2018
Calcium	61000	63		mg/Kg-dry	10	8/6/2018
Chromium	22	1.1		mg/Kg-dry	10	8/6/2018
Cobalt	14	1.1		mg/Kg-dry	10	8/6/2018
Copper	31	2.6		mg/Kg-dry	10	8/6/2018
Iron	26000	32		mg/Kg-dry	10	8/6/2018
Lead	16	0.53		mg/Kg-dry	10	8/6/2018
Magnesium	30000	32		mg/Kg-dry	10	8/6/2018
Manganese	430	1.1		mg/Kg-dry	10	8/6/2018
Nickel	38	1.1		mg/Kg-dry	10	8/6/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-006

Client Sample ID: B-3-010012
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Potassium	2600	32		mg/Kg-dry	10	8/6/2018
Selenium	ND	1.1		mg/Kg-dry	10	8/6/2018
Silver	ND	1.1		mg/Kg-dry	10	8/6/2018
Sodium	950	63		mg/Kg-dry	10	8/6/2018
Thallium	ND	1.1		mg/Kg-dry	10	8/6/2018
Vanadium	22	1.1		mg/Kg-dry	10	8/6/2018
Zinc	58	5.3		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.023	0.020		mg/Kg-dry	1	8/6/2018
Cyanide, Total	**SW9012A**			Prep Date: **8/7/2018**		Analyst: **MD**
Cyanide	ND	0.30		mg/Kg-dry	1	8/7/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.35			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	15.6	0.2	*	wt%	1	8/6/2018

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Date Reported: August 23, 2018
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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-007

Client Sample ID: B-4-0204
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **DM**
Acenaphthene	ND	0.037		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.037		mg/Kg-dry	1	8/9/2018
Anthracene	ND	0.037		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	ND	0.037		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	ND	0.037		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	ND	0.037		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	ND	0.037		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	ND	0.037		mg/Kg-dry	1	8/9/2018
Chrysene	ND	0.037		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	ND	0.037		mg/Kg-dry	1	8/9/2018
Fluoranthene	ND	0.037		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.037		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	ND	0.037		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.037		mg/Kg-dry	1	8/9/2018
Phenanthrene	ND	0.037		mg/Kg-dry	1	8/9/2018
Pyrene	ND	0.037		mg/Kg-dry	1	8/9/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	3.7	1.0		mg/Kg-dry	10	8/6/2018
Barium	41	1.0		mg/Kg-dry	10	8/6/2018
Cadmium	ND	0.51		mg/Kg-dry	10	8/6/2018
Chromium	8.1	1.0		mg/Kg-dry	10	8/6/2018
Lead	21	0.51		mg/Kg-dry	10	8/6/2018
Selenium	ND	1.0		mg/Kg-dry	10	8/6/2018
Silver	ND	1.0		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.17	0.019		mg/Kg-dry	1	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.45			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	11.5	0.2	*	wt%	1	8/6/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-008

Client Sample ID: B-4-010012
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **DM**
Acenaphthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.039		mg/Kg-dry	1	8/9/2018
Anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Chrysene	ND	0.039		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.039		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.039		mg/Kg-dry	1	8/9/2018
Phenanthrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	6.7	1.0		mg/Kg-dry	10	8/6/2018
Barium	5.9	1.0		mg/Kg-dry	10	8/6/2018
Cadmium	ND	0.51		mg/Kg-dry	10	8/6/2018
Chromium	4.5	1.0		mg/Kg-dry	10	8/6/2018
Lead	3.4	0.51		mg/Kg-dry	10	8/6/2018
Selenium	ND	1.0		mg/Kg-dry	10	8/6/2018
Silver	ND	1.0		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	ND	0.023		mg/Kg-dry	1	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.15			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	16.5	0.2	*	wt%	1	8/6/2018

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Date Reported: August 23, 2018
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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-009

Client Sample ID: B-5-0305
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/2/2018**		Analyst: **AET**
Acetone	ND	0.13		mg/Kg-dry	1	8/7/2018
Benzene	ND	0.0088		mg/Kg-dry	1	8/7/2018
Bromodichloromethane	ND	0.0088		mg/Kg-dry	1	8/7/2018
Bromoform	ND	0.0088		mg/Kg-dry	1	8/7/2018
Bromomethane	ND	0.018		mg/Kg-dry	1	8/7/2018
2-Butanone	ND	0.13		mg/Kg-dry	1	8/7/2018
Carbon disulfide	ND	0.088		mg/Kg-dry	1	8/7/2018
Carbon tetrachloride	ND	0.0088		mg/Kg-dry	1	8/7/2018
Chlorobenzene	ND	0.0088		mg/Kg-dry	1	8/7/2018
Chloroethane	ND	0.018		mg/Kg-dry	1	8/7/2018
Chloroform	ND	0.0088		mg/Kg-dry	1	8/7/2018
Chloromethane	ND	0.018		mg/Kg-dry	1	8/7/2018
Dibromochloromethane	ND	0.0088		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethane	ND	0.0088		mg/Kg-dry	1	8/7/2018
1,2-Dichloroethane	ND	0.0088		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethene	ND	0.0088		mg/Kg-dry	1	8/7/2018
cis-1,2-Dichloroethene	ND	0.0088		mg/Kg-dry	1	8/7/2018
trans-1,2-Dichloroethene	ND	0.0088		mg/Kg-dry	1	8/7/2018
1,2-Dichloropropane	ND	0.0088		mg/Kg-dry	1	8/7/2018
cis-1,3-Dichloropropene	ND	0.0035		mg/Kg-dry	1	8/7/2018
trans-1,3-Dichloropropene	ND	0.0035		mg/Kg-dry	1	8/7/2018
Ethylbenzene	ND	0.0088		mg/Kg-dry	1	8/7/2018
2-Hexanone	ND	0.035		mg/Kg-dry	1	8/7/2018
4-Methyl-2-pentanone	ND	0.035		mg/Kg-dry	1	8/7/2018
Methylene chloride	ND	0.018		mg/Kg-dry	1	8/7/2018
Methyl tert-butyl ether	ND	0.0088		mg/Kg-dry	1	8/7/2018
Styrene	ND	0.0088		mg/Kg-dry	1	8/7/2018
1,1,2,2-Tetrachloroethane	ND	0.0088		mg/Kg-dry	1	8/7/2018
Tetrachloroethene	ND	0.0088		mg/Kg-dry	1	8/7/2018
Toluene	ND	0.0088		mg/Kg-dry	1	8/7/2018
1,1,1-Trichloroethane	ND	0.0088		mg/Kg-dry	1	8/7/2018
1,1,2-Trichloroethane	ND	0.0088		mg/Kg-dry	1	8/7/2018
Trichloroethene	ND	0.0088		mg/Kg-dry	1	8/7/2018
Vinyl chloride	ND	0.0088		mg/Kg-dry	1	8/7/2018
Xylenes, Total	ND	0.027		mg/Kg-dry	1	8/7/2018
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	0.070	0.036		mg/Kg-dry	1	8/9/2018
Acenaphthylene	0.044	0.036		mg/Kg-dry	1	8/9/2018

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Date Reported: August 23, 2018
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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-009

Client Sample ID: B-5-0305
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**		Prep Date: **8/9/2018**		Analyst: **CW**	
Aniline	ND	0.36		mg/Kg-dry	1	8/9/2018
Anthracene	0.27	0.036		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	1.5	0.036		mg/Kg-dry	1	8/9/2018
Benzidine	ND	0.36		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	1.4	0.036		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	1.4	0.036		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	0.97	0.036		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	1.2	0.036		mg/Kg-dry	1	8/9/2018
Benzoic acid	ND	0.90		mg/Kg-dry	1	8/9/2018
Benzyl alcohol	ND	0.19		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethoxy)methane	ND	0.19		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethyl)ether	ND	0.19		mg/Kg-dry	1	8/9/2018
Bis(2-ethylhexyl)phthalate	ND	0.90		mg/Kg-dry	1	8/9/2018
4-Bromophenyl phenyl ether	ND	0.19		mg/Kg-dry	1	8/9/2018
Butyl benzyl phthalate	ND	0.19		mg/Kg-dry	1	8/9/2018
Carbazole	ND	0.19		mg/Kg-dry	1	8/9/2018
4-Chloroaniline	ND	0.19		mg/Kg-dry	1	8/9/2018
4-Chloro-3-methylphenol	ND	0.36		mg/Kg-dry	1	8/9/2018
2-Chloronaphthalene	ND	0.19		mg/Kg-dry	1	8/9/2018
2-Chlorophenol	ND	0.19		mg/Kg-dry	1	8/9/2018
4-Chlorophenyl phenyl ether	ND	0.19		mg/Kg-dry	1	8/9/2018
Chrysene	1.5	0.036		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	0.44	0.036		mg/Kg-dry	1	8/9/2018
Dibenzofuran	ND	0.19		mg/Kg-dry	1	8/9/2018
1,2-Dichlorobenzene	ND	0.19		mg/Kg-dry	1	8/9/2018
1,3-Dichlorobenzene	ND	0.19		mg/Kg-dry	1	8/9/2018
1,4-Dichlorobenzene	ND	0.19		mg/Kg-dry	1	8/9/2018
3,3´-Dichlorobenzidine	ND	0.19		mg/Kg-dry	1	8/9/2018
2,4-Dichlorophenol	ND	0.19		mg/Kg-dry	1	8/9/2018
Diethyl phthalate	ND	0.19		mg/Kg-dry	1	8/9/2018
2,4-Dimethylphenol	ND	0.19		mg/Kg-dry	1	8/9/2018
Dimethyl phthalate	ND	0.19		mg/Kg-dry	1	8/9/2018
4,6-Dinitro-2-methylphenol	ND	0.36		mg/Kg-dry	1	8/9/2018
2,4-Dinitrophenol	ND	0.90		mg/Kg-dry	1	8/9/2018
2,4-Dinitrotoluene	ND	0.036		mg/Kg-dry	1	8/9/2018
2,6-Dinitrotoluene	ND	0.036		mg/Kg-dry	1	8/9/2018
Di-n-butyl phthalate	ND	0.19		mg/Kg-dry	1	8/9/2018
Di-n-octyl phthalate	ND	0.19		mg/Kg-dry	1	8/9/2018

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Date Reported: August 23, 2018
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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-009

Client Sample ID: B-5-0305
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Fluoranthene	2.7	0.036		mg/Kg-dry	1	8/9/2018
Fluorene	0.061	0.036		mg/Kg-dry	1	8/9/2018
Hexachlorobenzene	ND	0.19		mg/Kg-dry	1	8/9/2018
Hexachlorobutadiene	ND	0.19		mg/Kg-dry	1	8/9/2018
Hexachlorocyclopentadiene	ND	0.19		mg/Kg-dry	1	8/9/2018
Hexachloroethane	ND	0.19		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	0.89	0.036		mg/Kg-dry	1	8/9/2018
Isophorone	ND	0.19		mg/Kg-dry	1	8/9/2018
2-Methylnaphthalene	ND	0.19		mg/Kg-dry	1	8/9/2018
2-Methylphenol	ND	0.19		mg/Kg-dry	1	8/9/2018
4-Methylphenol	ND	0.19		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.036		mg/Kg-dry	1	8/9/2018
2-Nitroaniline	ND	0.19		mg/Kg-dry	1	8/9/2018
3-Nitroaniline	ND	0.19		mg/Kg-dry	1	8/9/2018
4-Nitroaniline	ND	0.19		mg/Kg-dry	1	8/9/2018
2-Nitrophenol	ND	0.19		mg/Kg-dry	1	8/9/2018
4-Nitrophenol	ND	0.36		mg/Kg-dry	1	8/9/2018
Nitrobenzene	ND	0.036		mg/Kg-dry	1	8/9/2018
N-Nitrosodi-n-propylamine	ND	0.036		mg/Kg-dry	1	8/9/2018
N-Nitrosodimethylamine	ND	0.19		mg/Kg-dry	1	8/9/2018
N-Nitrosodiphenylamine	ND	0.036		mg/Kg-dry	1	8/9/2018
2, 2'-oxybis(1-Chloropropane)	ND	0.19		mg/Kg-dry	1	8/9/2018
Pentachlorophenol	ND	0.036		mg/Kg-dry	1	8/9/2018
Phenanthrene	1.1	0.036		mg/Kg-dry	1	8/9/2018
Phenol	ND	0.19		mg/Kg-dry	1	8/9/2018
Pyrene	2.3	0.036		mg/Kg-dry	1	8/9/2018
Pyridine	ND	0.73		mg/Kg-dry	1	8/9/2018
1,2,4-Trichlorobenzene	ND	0.19		mg/Kg-dry	1	8/9/2018
2,4,5-Trichlorophenol	ND	0.19		mg/Kg-dry	1	8/9/2018
2,4,6-Trichlorophenol	ND	0.19		mg/Kg-dry	1	8/9/2018
PCBs	**SW8082A (SW3550B)**			Prep Date: **8/6/2018**		Analyst: **GVC**
Aroclor 1016	ND	0.087		mg/Kg-dry	1	8/7/2018
Aroclor 1221	ND	0.087		mg/Kg-dry	1	8/7/2018
Aroclor 1232	ND	0.087		mg/Kg-dry	1	8/7/2018
Aroclor 1242	ND	0.087		mg/Kg-dry	1	8/7/2018
Aroclor 1248	ND	0.087		mg/Kg-dry	1	8/7/2018
Aroclor 1254	0.16	0.087		mg/Kg-dry	1	8/7/2018
Aroclor 1260	ND	0.087		mg/Kg-dry	1	8/7/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-009

Client Sample ID: B-5-0305
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Pesticides		**SW8081B (SW3550B)**		Prep Date: **8/6/2018**		Analyst: **GVC**
4,4´-DDD	ND	0.0017		mg/Kg-dry	1	8/7/2018
4,4´-DDE	ND	0.0017		mg/Kg-dry	1	8/7/2018
4,4´-DDT	ND	0.0017		mg/Kg-dry	1	8/7/2018
Aldrin	ND	0.0017		mg/Kg-dry	1	8/7/2018
alpha-BHC	ND	0.0017		mg/Kg-dry	1	8/7/2018
alpha-Chlordane	ND	0.0017		mg/Kg-dry	1	8/7/2018
beta-BHC	ND	0.0017		mg/Kg-dry	1	8/7/2018
Chlordane	ND	0.017		mg/Kg-dry	1	8/7/2018
delta-BHC	ND	0.0017		mg/Kg-dry	1	8/7/2018
Dieldrin	ND	0.0017		mg/Kg-dry	1	8/7/2018
Endosulfan I	ND	0.0017		mg/Kg-dry	1	8/7/2018
Endosulfan II	ND	0.0017		mg/Kg-dry	1	8/7/2018
Endosulfan sulfate	ND	0.0017		mg/Kg-dry	1	8/7/2018
Endrin	ND	0.0017		mg/Kg-dry	1	8/7/2018
Endrin aldehyde	ND	0.0017		mg/Kg-dry	1	8/7/2018
Endrin ketone	ND	0.0017		mg/Kg-dry	1	8/7/2018
gamma-BHC	ND	0.0017		mg/Kg-dry	1	8/7/2018
gamma-Chlordane	ND	0.0017		mg/Kg-dry	1	8/7/2018
Heptachlor	ND	0.0017		mg/Kg-dry	1	8/7/2018
Heptachlor epoxide	ND	0.0017		mg/Kg-dry	1	8/7/2018
Methoxychlor	ND	0.0017		mg/Kg-dry	1	8/7/2018
Toxaphene	ND	0.036		mg/Kg-dry	1	8/7/2018
Metals by ICP/MS		**SW6020A (SW3050B)**		Prep Date: **8/6/2018**		Analyst: **MDT**
Aluminum	5500	20		mg/Kg-dry	10	8/6/2018
Antimony	ND	2.0		mg/Kg-dry	10	8/7/2018
Arsenic	3.2	0.99		mg/Kg-dry	10	8/6/2018
Barium	95	0.99		mg/Kg-dry	10	8/6/2018
Beryllium	0.53	0.49		mg/Kg-dry	10	8/7/2018
Cadmium	ND	0.49		mg/Kg-dry	10	8/6/2018
Calcium	150000	590		mg/Kg-dry	100	8/7/2018
Chromium	13	0.99		mg/Kg-dry	10	8/6/2018
Cobalt	2.9	0.99		mg/Kg-dry	10	8/6/2018
Copper	26	2.5		mg/Kg-dry	10	8/6/2018
Iron	23000	30		mg/Kg-dry	10	8/6/2018
Lead	120	0.49		mg/Kg-dry	10	8/6/2018
Magnesium	56000	30		mg/Kg-dry	10	8/6/2018
Manganese	710	0.99		mg/Kg-dry	10	8/6/2018
Nickel	10	0.99		mg/Kg-dry	10	8/6/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-009

Client Sample ID: B-5-0305
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Potassium	700	30		mg/Kg-dry	10	8/6/2018
Selenium	ND	0.99		mg/Kg-dry	10	8/6/2018
Silver	ND	0.99		mg/Kg-dry	10	8/6/2018
Sodium	750	59		mg/Kg-dry	10	8/6/2018
Thallium	ND	0.99		mg/Kg-dry	10	8/6/2018
Vanadium	17	0.99		mg/Kg-dry	10	8/6/2018
Zinc	190	4.9		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.073	0.022		mg/Kg-dry	1	8/6/2018
Cyanide, Total	**SW9012A**			Prep Date: **8/7/2018**		Analyst: **MD**
Cyanide	ND	0.28		mg/Kg-dry	1	8/7/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	9.16			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	10.6	0.2	*	wt%	1	8/6/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-010

Client Sample ID: B-5-010012
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.039		mg/Kg-dry	1	8/9/2018
Anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Chrysene	ND	0.039		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.039		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.039		mg/Kg-dry	1	8/9/2018
Phenanthrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	4.5	1.1		mg/Kg-dry	10	8/6/2018
Barium	8.3	1.1		mg/Kg-dry	10	8/6/2018
Cadmium	ND	0.54		mg/Kg-dry	10	8/6/2018
Chromium	6.7	1.1		mg/Kg-dry	10	8/6/2018
Lead	7.5	0.54		mg/Kg-dry	10	8/6/2018
Selenium	1.2	1.1		mg/Kg-dry	10	8/6/2018
Silver	ND	1.1		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	ND	0.023		mg/Kg-dry	1	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.24			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	17.1	0.2	*	wt%	1	8/6/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-011

Client Sample ID: B-6-0103
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	0.12	0.038		mg/Kg-dry	1	8/9/2018
Acenaphthylene	0.081	0.038		mg/Kg-dry	1	8/9/2018
Anthracene	0.57	0.038		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	1.3	0.038		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	1.2	0.038		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	1.2	0.038		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	0.73	0.038		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	1.1	0.038		mg/Kg-dry	1	8/9/2018
Chrysene	1.4	0.038		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	0.22	0.038		mg/Kg-dry	1	8/9/2018
Fluoranthene	3.1	0.038		mg/Kg-dry	1	8/9/2018
Fluorene	0.22	0.038		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	0.71	0.038		mg/Kg-dry	1	8/9/2018
Naphthalene	0.096	0.038		mg/Kg-dry	1	8/9/2018
Phenanthrene	2.4	0.038		mg/Kg-dry	1	8/9/2018
Pyrene	2.4	0.038		mg/Kg-dry	1	8/9/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	9.2	1.0		mg/Kg-dry	10	8/6/2018
Barium	270	1.0		mg/Kg-dry	10	8/6/2018
Cadmium	0.81	0.50		mg/Kg-dry	10	8/6/2018
Chromium	16	1.0		mg/Kg-dry	10	8/6/2018
Lead	170	0.50		mg/Kg-dry	10	8/6/2018
Selenium	1.0	1.0		mg/Kg-dry	10	8/6/2018
Silver	ND	1.0		mg/Kg-dry	10	8/6/2018
SPLP Metals by ICP/MS	**SW1312/6020A (SW3005A)**			Prep Date: **8/21/2018**		Analyst: **JG**
Lead	0.011	0.0020		mg/L	2	8/22/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.43	0.022		mg/Kg-dry	1	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	7.92			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	13.7	0.2	*	wt%	1	8/6/2018

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Date Reported: August 23, 2018
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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-012

Client Sample ID: B-6-09011
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/2/2018**		Analyst: **AET**
Acetone	ND	0.078		mg/Kg-dry	1	8/7/2018
Benzene	ND	0.0052		mg/Kg-dry	1	8/7/2018
Bromodichloromethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
Bromoform	ND	0.0052		mg/Kg-dry	1	8/7/2018
Bromomethane	ND	0.010		mg/Kg-dry	1	8/7/2018
2-Butanone	ND	0.078		mg/Kg-dry	1	8/7/2018
Carbon disulfide	ND	0.052		mg/Kg-dry	1	8/7/2018
Carbon tetrachloride	ND	0.0052		mg/Kg-dry	1	8/7/2018
Chlorobenzene	ND	0.0052		mg/Kg-dry	1	8/7/2018
Chloroethane	ND	0.010		mg/Kg-dry	1	8/7/2018
Chloroform	ND	0.0052		mg/Kg-dry	1	8/7/2018
Chloromethane	ND	0.010		mg/Kg-dry	1	8/7/2018
Dibromochloromethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,2-Dichloroethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethene	ND	0.0052		mg/Kg-dry	1	8/7/2018
cis-1,2-Dichloroethene	ND	0.0052		mg/Kg-dry	1	8/7/2018
trans-1,2-Dichloroethene	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,2-Dichloropropane	ND	0.0052		mg/Kg-dry	1	8/7/2018
cis-1,3-Dichloropropene	ND	0.0021		mg/Kg-dry	1	8/7/2018
trans-1,3-Dichloropropene	ND	0.0021		mg/Kg-dry	1	8/7/2018
Ethylbenzene	ND	0.0052		mg/Kg-dry	1	8/7/2018
2-Hexanone	ND	0.021		mg/Kg-dry	1	8/7/2018
4-Methyl-2-pentanone	ND	0.021		mg/Kg-dry	1	8/7/2018
Methylene chloride	ND	0.010		mg/Kg-dry	1	8/7/2018
Methyl tert-butyl ether	ND	0.0052		mg/Kg-dry	1	8/7/2018
Styrene	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,1,2,2-Tetrachloroethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
Tetrachloroethene	ND	0.0052		mg/Kg-dry	1	8/7/2018
Toluene	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,1,1-Trichloroethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,1,2-Trichloroethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
Trichloroethene	ND	0.0052		mg/Kg-dry	1	8/7/2018
Vinyl chloride	ND	0.0052		mg/Kg-dry	1	8/7/2018
Xylenes, Total	ND	0.016		mg/Kg-dry	1	8/7/2018
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.039		mg/Kg-dry	1	8/9/2018

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Date Reported: August 23, 2018
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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-012

Client Sample ID: B-6-09011
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**		Prep Date: **8/9/2018**		Analyst: **CW**	
Aniline	ND	0.39		mg/Kg-dry	1	8/9/2018
Anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzidine	ND	0.39		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzoic acid	ND	0.98		mg/Kg-dry	1	8/9/2018
Benzyl alcohol	ND	0.20		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethoxy)methane	ND	0.20		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethyl)ether	ND	0.20		mg/Kg-dry	1	8/9/2018
Bis(2-ethylhexyl)phthalate	ND	0.98		mg/Kg-dry	1	8/9/2018
4-Bromophenyl phenyl ether	ND	0.20		mg/Kg-dry	1	8/9/2018
Butyl benzyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
Carbazole	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Chloroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Chloro-3-methylphenol	ND	0.39		mg/Kg-dry	1	8/9/2018
2-Chloronaphthalene	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Chlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Chlorophenyl phenyl ether	ND	0.20		mg/Kg-dry	1	8/9/2018
Chrysene	ND	0.039		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Dibenzofuran	ND	0.20		mg/Kg-dry	1	8/9/2018
1,2-Dichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
1,3-Dichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
1,4-Dichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
3,3´-Dichlorobenzidine	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4-Dichlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Diethyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4-Dimethylphenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Dimethyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
4,6-Dinitro-2-methylphenol	ND	0.39		mg/Kg-dry	1	8/9/2018
2,4-Dinitrophenol	ND	0.98		mg/Kg-dry	1	8/9/2018
2,4-Dinitrotoluene	ND	0.039		mg/Kg-dry	1	8/9/2018
2,6-Dinitrotoluene	ND	0.039		mg/Kg-dry	1	8/9/2018
Di-n-butyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018
Di-n-octyl phthalate	ND	0.20		mg/Kg-dry	1	8/9/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-012

Client Sample ID: B-6-09011
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.039		mg/Kg-dry	1	8/9/2018
Hexachlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
Hexachlorobutadiene	ND	0.20		mg/Kg-dry	1	8/9/2018
Hexachlorocyclopentadiene	ND	0.20		mg/Kg-dry	1	8/9/2018
Hexachloroethane	ND	0.20		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Isophorone	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Methylnaphthalene	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Methylphenol	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Methylphenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.039		mg/Kg-dry	1	8/9/2018
2-Nitroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
3-Nitroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Nitroaniline	ND	0.20		mg/Kg-dry	1	8/9/2018
2-Nitrophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
4-Nitrophenol	ND	0.39		mg/Kg-dry	1	8/9/2018
Nitrobenzene	ND	0.039		mg/Kg-dry	1	8/9/2018
N-Nitrosodi-n-propylamine	ND	0.039		mg/Kg-dry	1	8/9/2018
N-Nitrosodimethylamine	ND	0.20		mg/Kg-dry	1	8/9/2018
N-Nitrosodiphenylamine	ND	0.039		mg/Kg-dry	1	8/9/2018
2, 2'-oxybis(1-Chloropropane)	ND	0.20		mg/Kg-dry	1	8/9/2018
Pentachlorophenol	ND	0.039		mg/Kg-dry	1	8/9/2018
Phenanthrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Phenol	ND	0.20		mg/Kg-dry	1	8/9/2018
Pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Pyridine	ND	0.79		mg/Kg-dry	1	8/9/2018
1,2,4-Trichlorobenzene	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4,5-Trichlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
2,4,6-Trichlorophenol	ND	0.20		mg/Kg-dry	1	8/9/2018
PCBs	**SW8082A (SW3550B)**			Prep Date: **8/6/2018**		Analyst: **GVC**
Aroclor 1016	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1221	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1232	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1242	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1248	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1254	ND	0.094		mg/Kg-dry	1	8/7/2018
Aroclor 1260	ND	0.094		mg/Kg-dry	1	8/7/2018

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Date Reported: August 23, 2018
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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-012

Client Sample ID: B-6-09011
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Pesticides		**SW8081B (SW3550B)**		Prep Date: **8/6/2018**		Analyst: **GVC**
4,4´-DDD	ND	0.0019		mg/Kg-dry	1	8/7/2018
4,4´-DDE	ND	0.0019		mg/Kg-dry	1	8/7/2018
4,4´-DDT	ND	0.0019		mg/Kg-dry	1	8/7/2018
Aldrin	ND	0.0019		mg/Kg-dry	1	8/7/2018
alpha-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
alpha-Chlordane	ND	0.0019		mg/Kg-dry	1	8/7/2018
beta-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
Chlordane	ND	0.019		mg/Kg-dry	1	8/7/2018
delta-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
Dieldrin	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endosulfan I	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endosulfan II	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endosulfan sulfate	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endrin	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endrin aldehyde	ND	0.0019		mg/Kg-dry	1	8/7/2018
Endrin ketone	ND	0.0019		mg/Kg-dry	1	8/7/2018
gamma-BHC	ND	0.0019		mg/Kg-dry	1	8/7/2018
gamma-Chlordane	ND	0.0019		mg/Kg-dry	1	8/7/2018
Heptachlor	ND	0.0019		mg/Kg-dry	1	8/7/2018
Heptachlor epoxide	ND	0.0019		mg/Kg-dry	1	8/7/2018
Methoxychlor	ND	0.0019		mg/Kg-dry	1	8/7/2018
Toxaphene	ND	0.039		mg/Kg-dry	1	8/7/2018
Metals by ICP/MS		**SW6020A (SW3050B)**		Prep Date: **8/6/2018**		Analyst: **MDT**
Aluminum	9000	20		mg/Kg-dry	10	8/6/2018
Antimony	ND	2.0		mg/Kg-dry	10	8/7/2018
Arsenic	3.9	1.0		mg/Kg-dry	10	8/6/2018
Barium	48	1.0		mg/Kg-dry	10	8/6/2018
Beryllium	0.55	0.51		mg/Kg-dry	10	8/7/2018
Cadmium	ND	0.51		mg/Kg-dry	10	8/6/2018
Calcium	62000	61		mg/Kg-dry	10	8/6/2018
Chromium	18	1.0		mg/Kg-dry	10	8/6/2018
Cobalt	15	1.0		mg/Kg-dry	10	8/6/2018
Copper	43	2.5		mg/Kg-dry	10	8/6/2018
Iron	30000	31		mg/Kg-dry	10	8/6/2018
Lead	20	0.51		mg/Kg-dry	10	8/6/2018
Magnesium	36000	31		mg/Kg-dry	10	8/6/2018
Manganese	650	1.0		mg/Kg-dry	10	8/6/2018
Nickel	37	1.0		mg/Kg-dry	10	8/6/2018

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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-012

Client Sample ID: B-6-09011
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Potassium	2000	31		mg/Kg-dry	10	8/6/2018
Selenium	1.1	1.0		mg/Kg-dry	10	8/6/2018
Silver	ND	1.0		mg/Kg-dry	10	8/6/2018
Sodium	140	61		mg/Kg-dry	10	8/6/2018
Thallium	ND	1.0		mg/Kg-dry	10	8/6/2018
Vanadium	20	1.0		mg/Kg-dry	10	8/6/2018
Zinc	54	5.1		mg/Kg-dry	10	8/6/2018
SPLP Metals by ICP/MS	**SW1312/6020A (SW3005A)**			Prep Date: **8/21/2018**		Analyst: **JG**
Iron	0.16	0.10		mg/L	2	8/22/2018
Manganese	ND	0.0040		mg/L	2	8/22/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	ND	0.022		mg/Kg-dry	1	8/6/2018
Cyanide, Total	**SW9012A**			Prep Date: **8/7/2018**		Analyst: **MD**
Cyanide	ND	0.30		mg/Kg-dry	1	8/7/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	7.75			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	15.6	0.2	*	wt%	1	8/6/2018

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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-013

Client Sample ID: B-7-0103
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	0.42	0.035		mg/Kg-dry	1	8/9/2018
Acenaphthylene	0.71	0.035		mg/Kg-dry	1	8/9/2018
Anthracene	1.9	0.035		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	8.6	0.18		mg/Kg-dry	5	8/10/2018
Benzo(a)pyrene	7.9	0.18		mg/Kg-dry	5	8/10/2018
Benzo(b)fluoranthene	7.4	0.18		mg/Kg-dry	5	8/10/2018
Benzo(g,h,i)perylene	3.8	0.035		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	3.8	0.035		mg/Kg-dry	1	8/9/2018
Chrysene	8.5	0.18		mg/Kg-dry	5	8/10/2018
Dibenz(a,h)anthracene	1.2	0.035		mg/Kg-dry	1	8/9/2018
Fluoranthene	18	0.18		mg/Kg-dry	5	8/10/2018
Fluorene	0.60	0.035		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	3.6	0.035		mg/Kg-dry	1	8/9/2018
Naphthalene	0.27	0.035		mg/Kg-dry	1	8/9/2018
Phenanthrene	9.5	0.18		mg/Kg-dry	5	8/10/2018
Pyrene	15	0.18		mg/Kg-dry	5	8/10/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	9.1	0.98		mg/Kg-dry	10	8/6/2018
Barium	260	0.98		mg/Kg-dry	10	8/6/2018
Cadmium	0.77	0.49		mg/Kg-dry	10	8/6/2018
Chromium	36	0.98		mg/Kg-dry	10	8/6/2018
Lead	330	0.49		mg/Kg-dry	10	8/6/2018
Selenium	1.4	0.98		mg/Kg-dry	10	8/6/2018
Silver	ND	0.98		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.27	0.020		mg/Kg-dry	1	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.18			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	7.3	0.2	*	wt%	1	8/6/2018

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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-014

Client Sample ID: B-7-010012
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	ND	0.043		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.043		mg/Kg-dry	1	8/9/2018
Anthracene	ND	0.043		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	0.049	0.043		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	0.053	0.043		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	ND	0.043		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	ND	0.043		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	0.046	0.043		mg/Kg-dry	1	8/9/2018
Chrysene	0.051	0.043		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	ND	0.043		mg/Kg-dry	1	8/9/2018
Fluoranthene	0.094	0.043		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.043		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	ND	0.043		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.043		mg/Kg-dry	1	8/9/2018
Phenanthrene	0.061	0.043		mg/Kg-dry	1	8/9/2018
Pyrene	0.080	0.043		mg/Kg-dry	1	8/9/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	15	1.2		mg/Kg-dry	10	8/6/2018
Barium	68	1.2		mg/Kg-dry	10	8/6/2018
Cadmium	ND	0.58		mg/Kg-dry	10	8/6/2018
Chromium	23	1.2		mg/Kg-dry	10	8/6/2018
Lead	93	0.58		mg/Kg-dry	10	8/6/2018
Selenium	1.4	1.2		mg/Kg-dry	10	8/6/2018
Silver	ND	1.2		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.57	0.022		mg/Kg-dry	1	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.01			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	23.4	0.2	*	wt%	1	8/6/2018

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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-015

Client Sample ID: B-8-0103
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/2/2018**		Analyst: **AET**
Acetone	ND	0.078		mg/Kg-dry	1	8/7/2018
Benzene	ND	0.0052		mg/Kg-dry	1	8/7/2018
Bromodichloromethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
Bromoform	ND	0.0052		mg/Kg-dry	1	8/7/2018
Bromomethane	ND	0.010		mg/Kg-dry	1	8/7/2018
2-Butanone	ND	0.078		mg/Kg-dry	1	8/7/2018
Carbon disulfide	ND	0.052		mg/Kg-dry	1	8/7/2018
Carbon tetrachloride	ND	0.0052		mg/Kg-dry	1	8/7/2018
Chlorobenzene	ND	0.0052		mg/Kg-dry	1	8/7/2018
Chloroethane	ND	0.010		mg/Kg-dry	1	8/7/2018
Chloroform	ND	0.0052		mg/Kg-dry	1	8/7/2018
Chloromethane	ND	0.010		mg/Kg-dry	1	8/7/2018
Dibromochloromethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,2-Dichloroethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethene	ND	0.0052		mg/Kg-dry	1	8/7/2018
cis-1,2-Dichloroethene	ND	0.0052		mg/Kg-dry	1	8/7/2018
trans-1,2-Dichloroethene	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,2-Dichloropropane	ND	0.0052		mg/Kg-dry	1	8/7/2018
cis-1,3-Dichloropropene	ND	0.0021		mg/Kg-dry	1	8/7/2018
trans-1,3-Dichloropropene	ND	0.0021		mg/Kg-dry	1	8/7/2018
Ethylbenzene	ND	0.0052		mg/Kg-dry	1	8/7/2018
2-Hexanone	ND	0.021		mg/Kg-dry	1	8/7/2018
4-Methyl-2-pentanone	ND	0.021		mg/Kg-dry	1	8/7/2018
Methylene chloride	ND	0.010		mg/Kg-dry	1	8/7/2018
Methyl tert-butyl ether	ND	0.0052		mg/Kg-dry	1	8/7/2018
Styrene	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,1,2,2-Tetrachloroethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
Tetrachloroethene	ND	0.0052		mg/Kg-dry	1	8/7/2018
Toluene	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,1,1-Trichloroethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
1,1,2-Trichloroethane	ND	0.0052		mg/Kg-dry	1	8/7/2018
Trichloroethene	ND	0.0052		mg/Kg-dry	1	8/7/2018
Vinyl chloride	ND	0.0052		mg/Kg-dry	1	8/7/2018
Xylenes, Total	ND	0.016		mg/Kg-dry	1	8/7/2018
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	0.23	0.035		mg/Kg-dry	1	8/9/2018
Acenaphthylene	0.053	0.035		mg/Kg-dry	1	8/9/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-015

Client Sample ID: B-8-0103
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**		Prep Date: **8/9/2018**		Analyst: **CW**	
Aniline	ND	0.35		mg/Kg-dry	1	8/9/2018
Anthracene	0.79	0.035		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	1.8	0.035		mg/Kg-dry	1	8/9/2018
Benzidine	ND	0.35		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	1.8	0.035		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	1.4	0.035		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	1.1	0.035		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	1.5	0.035		mg/Kg-dry	1	8/9/2018
Benzoic acid	ND	0.88		mg/Kg-dry	1	8/9/2018
Benzyl alcohol	ND	0.18		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethoxy)methane	ND	0.18		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethyl)ether	ND	0.18		mg/Kg-dry	1	8/9/2018
Bis(2-ethylhexyl)phthalate	ND	0.88		mg/Kg-dry	1	8/9/2018
4-Bromophenyl phenyl ether	ND	0.18		mg/Kg-dry	1	8/9/2018
Butyl benzyl phthalate	ND	0.18		mg/Kg-dry	1	8/9/2018
Carbazole	ND	0.18		mg/Kg-dry	1	8/9/2018
4-Chloroaniline	ND	0.18		mg/Kg-dry	1	8/9/2018
4-Chloro-3-methylphenol	ND	0.35		mg/Kg-dry	1	8/9/2018
2-Chloronaphthalene	ND	0.18		mg/Kg-dry	1	8/9/2018
2-Chlorophenol	ND	0.18		mg/Kg-dry	1	8/9/2018
4-Chlorophenyl phenyl ether	ND	0.18		mg/Kg-dry	1	8/9/2018
Chrysene	1.7	0.035		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	0.35	0.035		mg/Kg-dry	1	8/9/2018
Dibenzofuran	ND	0.18		mg/Kg-dry	1	8/9/2018
1,2-Dichlorobenzene	ND	0.18		mg/Kg-dry	1	8/9/2018
1,3-Dichlorobenzene	ND	0.18		mg/Kg-dry	1	8/9/2018
1,4-Dichlorobenzene	ND	0.18		mg/Kg-dry	1	8/9/2018
3,3´-Dichlorobenzidine	ND	0.18		mg/Kg-dry	1	8/9/2018
2,4-Dichlorophenol	ND	0.18		mg/Kg-dry	1	8/9/2018
Diethyl phthalate	ND	0.18		mg/Kg-dry	1	8/9/2018
2,4-Dimethylphenol	ND	0.18		mg/Kg-dry	1	8/9/2018
Dimethyl phthalate	ND	0.18		mg/Kg-dry	1	8/9/2018
4,6-Dinitro-2-methylphenol	ND	0.35		mg/Kg-dry	1	8/9/2018
2,4-Dinitrophenol	ND	0.88		mg/Kg-dry	1	8/9/2018
2,4-Dinitrotoluene	ND	0.035		mg/Kg-dry	1	8/9/2018
2,6-Dinitrotoluene	ND	0.035		mg/Kg-dry	1	8/9/2018
Di-n-butyl phthalate	ND	0.18		mg/Kg-dry	1	8/9/2018
Di-n-octyl phthalate	ND	0.18		mg/Kg-dry	1	8/9/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-015

Client Sample ID: B-8-0103
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**		Prep Date: **8/9/2018**		Analyst: **CW**	
Fluoranthene	3.5	0.035		mg/Kg-dry	1	8/9/2018
Fluorene	0.26	0.035		mg/Kg-dry	1	8/9/2018
Hexachlorobenzene	ND	0.18		mg/Kg-dry	1	8/9/2018
Hexachlorobutadiene	ND	0.18		mg/Kg-dry	1	8/9/2018
Hexachlorocyclopentadiene	ND	0.18		mg/Kg-dry	1	8/9/2018
Hexachloroethane	ND	0.18		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	0.97	0.035		mg/Kg-dry	1	8/9/2018
Isophorone	ND	0.18		mg/Kg-dry	1	8/9/2018
2-Methylnaphthalene	ND	0.18		mg/Kg-dry	1	8/9/2018
2-Methylphenol	ND	0.18		mg/Kg-dry	1	8/9/2018
4-Methylphenol	ND	0.18		mg/Kg-dry	1	8/9/2018
Naphthalene	0.16	0.035		mg/Kg-dry	1	8/9/2018
2-Nitroaniline	ND	0.18		mg/Kg-dry	1	8/9/2018
3-Nitroaniline	ND	0.18		mg/Kg-dry	1	8/9/2018
4-Nitroaniline	ND	0.18		mg/Kg-dry	1	8/9/2018
2-Nitrophenol	ND	0.18		mg/Kg-dry	1	8/9/2018
4-Nitrophenol	ND	0.35		mg/Kg-dry	1	8/9/2018
Nitrobenzene	ND	0.035		mg/Kg-dry	1	8/9/2018
N-Nitrosodi-n-propylamine	ND	0.035		mg/Kg-dry	1	8/9/2018
N-Nitrosodimethylamine	ND	0.18		mg/Kg-dry	1	8/9/2018
N-Nitrosodiphenylamine	ND	0.035		mg/Kg-dry	1	8/9/2018
2, 2'-oxybis(1-Chloropropane)	ND	0.18		mg/Kg-dry	1	8/9/2018
Pentachlorophenol	ND	0.035		mg/Kg-dry	1	8/9/2018
Phenanthrene	2.9	0.035		mg/Kg-dry	1	8/9/2018
Phenol	ND	0.18		mg/Kg-dry	1	8/9/2018
Pyrene	3.3	0.035		mg/Kg-dry	1	8/9/2018
Pyridine	ND	0.71		mg/Kg-dry	1	8/9/2018
1,2,4-Trichlorobenzene	ND	0.18		mg/Kg-dry	1	8/9/2018
2,4,5-Trichlorophenol	ND	0.18		mg/Kg-dry	1	8/9/2018
2,4,6-Trichlorophenol	ND	0.18		mg/Kg-dry	1	8/9/2018
PCBs	**SW8082A (SW3550B)**		Prep Date: **8/8/2018**		Analyst: **GVC**	
Aroclor 1016	ND	0.084		mg/Kg-dry	1	8/8/2018
Aroclor 1221	ND	0.084		mg/Kg-dry	1	8/8/2018
Aroclor 1232	ND	0.084		mg/Kg-dry	1	8/8/2018
Aroclor 1242	ND	0.084		mg/Kg-dry	1	8/8/2018
Aroclor 1248	ND	0.084		mg/Kg-dry	1	8/8/2018
Aroclor 1254	ND	0.084		mg/Kg-dry	1	8/8/2018
Aroclor 1260	ND	0.084		mg/Kg-dry	1	8/8/2018

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Date Reported: August 23, 2018
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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-015

Client Sample ID: B-8-0103
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Pesticides		**SW8081B (SW3550B)**		Prep Date: **8/8/2018**		Analyst: **GVC**
4,4´-DDD	ND	0.0017		mg/Kg-dry	1	8/8/2018
4,4´-DDE	ND	0.0017		mg/Kg-dry	1	8/8/2018
4,4´-DDT	ND	0.0017		mg/Kg-dry	1	8/8/2018
Aldrin	ND	0.0017		mg/Kg-dry	1	8/8/2018
alpha-BHC	ND	0.0017		mg/Kg-dry	1	8/8/2018
alpha-Chlordane	ND	0.0017		mg/Kg-dry	1	8/8/2018
beta-BHC	ND	0.0017		mg/Kg-dry	1	8/8/2018
Chlordane	ND	0.017		mg/Kg-dry	1	8/8/2018
delta-BHC	ND	0.0017		mg/Kg-dry	1	8/8/2018
Dieldrin	ND	0.0017		mg/Kg-dry	1	8/8/2018
Endosulfan I	ND	0.0017		mg/Kg-dry	1	8/8/2018
Endosulfan II	ND	0.0017		mg/Kg-dry	1	8/8/2018
Endosulfan sulfate	ND	0.0017		mg/Kg-dry	1	8/8/2018
Endrin	ND	0.0017		mg/Kg-dry	1	8/8/2018
Endrin aldehyde	ND	0.0017		mg/Kg-dry	1	8/8/2018
Endrin ketone	ND	0.0017		mg/Kg-dry	1	8/8/2018
gamma-BHC	ND	0.0017		mg/Kg-dry	1	8/8/2018
gamma-Chlordane	ND	0.0017		mg/Kg-dry	1	8/8/2018
Heptachlor	ND	0.0017		mg/Kg-dry	1	8/8/2018
Heptachlor epoxide	ND	0.0017		mg/Kg-dry	1	8/8/2018
Methoxychlor	ND	0.0017		mg/Kg-dry	1	8/8/2018
Toxaphene	ND	0.035		mg/Kg-dry	1	8/8/2018
Metals by ICP/MS		**SW6020A (SW3050B)**		Prep Date: **8/6/2018**		Analyst: **MDT**
Aluminum	4900	18		mg/Kg-dry	10	8/6/2018
Antimony	ND	1.8		mg/Kg-dry	10	8/7/2018
Arsenic	5.7	0.92		mg/Kg-dry	10	8/6/2018
Barium	95	0.92		mg/Kg-dry	10	8/6/2018
Beryllium	0.55	0.46		mg/Kg-dry	10	8/7/2018
Cadmium	1.0	0.46		mg/Kg-dry	10	8/6/2018
Calcium	73000	55		mg/Kg-dry	10	8/6/2018
Chromium	12	0.92		mg/Kg-dry	10	8/6/2018
Cobalt	5.8	0.92		mg/Kg-dry	10	8/6/2018
Copper	87	2.3		mg/Kg-dry	10	8/6/2018
Iron	17000	28		mg/Kg-dry	10	8/6/2018
Lead	290	0.46		mg/Kg-dry	10	8/6/2018
Magnesium	35000	28		mg/Kg-dry	10	8/6/2018
Manganese	350	0.92		mg/Kg-dry	10	8/6/2018
Nickel	17	0.92		mg/Kg-dry	10	8/6/2018

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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-015

Client Sample ID: B-8-0103
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Potassium	800	28		mg/Kg-dry	10	8/6/2018
Selenium	1.2	0.92		mg/Kg-dry	10	8/6/2018
Silver	ND	0.92		mg/Kg-dry	10	8/6/2018
Sodium	210	55		mg/Kg-dry	10	8/6/2018
Thallium	ND	0.92		mg/Kg-dry	10	8/6/2018
Vanadium	19	0.92		mg/Kg-dry	10	8/6/2018
Zinc	130	4.6		mg/Kg-dry	10	8/6/2018
SPLP Metals by ICP/MS	**SW1312/6020A (SW3005A)**			Prep Date: **8/21/2018**		Analyst: **JG**
Iron	1.1	0.10		mg/L	2	8/22/2018
Lead	0.0096	0.0020		mg/L	2	8/22/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.47	0.018		mg/Kg-dry	1	8/6/2018
Cyanide, Total	**SW9012A**			Prep Date: **8/7/2018**		Analyst: **MD**
Cyanide	ND	0.27		mg/Kg-dry	1	8/7/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	7.83			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	6.1	0.2	*	wt%	1	8/6/2018

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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-016

Client Sample ID: B-8-08010
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.039		mg/Kg-dry	1	8/9/2018
Anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	ND	0.039		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Chrysene	ND	0.039		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	ND	0.039		mg/Kg-dry	1	8/9/2018
Fluoranthene	ND	0.039		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.039		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.039		mg/Kg-dry	1	8/9/2018
Phenanthrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Pyrene	ND	0.039		mg/Kg-dry	1	8/9/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	3.4	0.99		mg/Kg-dry	10	8/6/2018
Barium	61	0.99		mg/Kg-dry	10	8/6/2018
Cadmium	ND	0.49		mg/Kg-dry	10	8/6/2018
Chromium	21	0.99		mg/Kg-dry	10	8/6/2018
Lead	20	0.49		mg/Kg-dry	10	8/6/2018
Selenium	0.99	0.99		mg/Kg-dry	10	8/6/2018
Silver	ND	0.99		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	ND	0.019		mg/Kg-dry	1	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	7.35			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	15.4	0.2	*	wt%	1	8/6/2018

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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-017

Client Sample ID: B-9-0103
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	0.074	0.039		mg/Kg-dry	1	8/9/2018
Acenaphthylene	0.99	0.039		mg/Kg-dry	1	8/9/2018
Anthracene	0.91	0.039		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	4.1	0.039		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	3.9	0.039		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	3.4	0.039		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	2.3	0.039		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	3.3	0.039		mg/Kg-dry	1	8/9/2018
Chrysene	3.7	0.039		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	1.1	0.039		mg/Kg-dry	1	8/9/2018
Fluoranthene	6.5	0.19		mg/Kg-dry	5	8/10/2018
Fluorene	0.21	0.039		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	2.3	0.039		mg/Kg-dry	1	8/9/2018
Naphthalene	0.14	0.039		mg/Kg-dry	1	8/9/2018
Phenanthrene	2.8	0.039		mg/Kg-dry	1	8/9/2018
Pyrene	5.8	0.19		mg/Kg-dry	5	8/10/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	10	1.0		mg/Kg-dry	10	8/6/2018
Barium	250	1.0		mg/Kg-dry	10	8/6/2018
Cadmium	0.54	0.51		mg/Kg-dry	10	8/6/2018
Chromium	32	1.0		mg/Kg-dry	10	8/6/2018
Lead	2200	0.51		mg/Kg-dry	10	8/6/2018
Selenium	1.3	1.0		mg/Kg-dry	10	8/6/2018
Silver	ND	1.0		mg/Kg-dry	10	8/6/2018
TCLP Metals by ICP/MS	**SW1311/6020A (SW3005A)**			Prep Date: **8/21/2018**		Analyst: **JG**
Lead	0.82	0.0050		mg/L	5	8/22/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	1.5	0.066		mg/Kg-dry	3	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	7.99			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	15.2	0.2	*	wt%	1	8/6/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-018

Client Sample ID: B-9-0507
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Volatile Organic Compounds by GC/MS	**SW5035/8260B**			Prep Date: **8/2/2018**		Analyst: **AET**
Acetone	ND	0.091		mg/Kg-dry	1	8/7/2018
Benzene	ND	0.0061		mg/Kg-dry	1	8/7/2018
Bromodichloromethane	ND	0.0061		mg/Kg-dry	1	8/7/2018
Bromoform	ND	0.0061		mg/Kg-dry	1	8/7/2018
Bromomethane	ND	0.012		mg/Kg-dry	1	8/7/2018
2-Butanone	ND	0.091		mg/Kg-dry	1	8/7/2018
Carbon disulfide	ND	0.061		mg/Kg-dry	1	8/7/2018
Carbon tetrachloride	ND	0.0061		mg/Kg-dry	1	8/7/2018
Chlorobenzene	ND	0.0061		mg/Kg-dry	1	8/7/2018
Chloroethane	ND	0.012		mg/Kg-dry	1	8/7/2018
Chloroform	ND	0.0061		mg/Kg-dry	1	8/7/2018
Chloromethane	ND	0.012		mg/Kg-dry	1	8/7/2018
Dibromochloromethane	ND	0.0061		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethane	ND	0.0061		mg/Kg-dry	1	8/7/2018
1,2-Dichloroethane	ND	0.0061		mg/Kg-dry	1	8/7/2018
1,1-Dichloroethene	ND	0.0061		mg/Kg-dry	1	8/7/2018
cis-1,2-Dichloroethene	ND	0.0061		mg/Kg-dry	1	8/7/2018
trans-1,2-Dichloroethene	ND	0.0061		mg/Kg-dry	1	8/7/2018
1,2-Dichloropropane	ND	0.0061		mg/Kg-dry	1	8/7/2018
cis-1,3-Dichloropropene	ND	0.0024		mg/Kg-dry	1	8/7/2018
trans-1,3-Dichloropropene	ND	0.0024		mg/Kg-dry	1	8/7/2018
Ethylbenzene	ND	0.0061		mg/Kg-dry	1	8/7/2018
2-Hexanone	ND	0.024		mg/Kg-dry	1	8/7/2018
4-Methyl-2-pentanone	ND	0.024		mg/Kg-dry	1	8/7/2018
Methylene chloride	ND	0.012		mg/Kg-dry	1	8/7/2018
Methyl tert-butyl ether	ND	0.0061		mg/Kg-dry	1	8/7/2018
Styrene	ND	0.0061		mg/Kg-dry	1	8/7/2018
1,1,2,2-Tetrachloroethane	ND	0.0061		mg/Kg-dry	1	8/7/2018
Tetrachloroethene	ND	0.0061		mg/Kg-dry	1	8/7/2018
Toluene	ND	0.0061		mg/Kg-dry	1	8/7/2018
1,1,1-Trichloroethane	ND	0.0061		mg/Kg-dry	1	8/7/2018
1,1,2-Trichloroethane	ND	0.0061		mg/Kg-dry	1	8/7/2018
Trichloroethene	ND	0.0061		mg/Kg-dry	1	8/7/2018
Vinyl chloride	ND	0.0061		mg/Kg-dry	1	8/7/2018
Xylenes, Total	ND	0.018		mg/Kg-dry	1	8/7/2018
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	ND	0.042		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.042		mg/Kg-dry	1	8/9/2018

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Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-018

Client Sample ID: B-9-0507
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**		Prep Date: **8/9/2018**		Analyst: **CW**	
Aniline	ND	0.43		mg/Kg-dry	1	8/9/2018
Anthracene	ND	0.042		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	ND	0.042		mg/Kg-dry	1	8/9/2018
Benzidine	ND	0.42		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	ND	0.042		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	ND	0.042		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	ND	0.042		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	ND	0.042		mg/Kg-dry	1	8/9/2018
Benzoic acid	ND	1.1		mg/Kg-dry	1	8/9/2018
Benzyl alcohol	ND	0.22		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethoxy)methane	ND	0.22		mg/Kg-dry	1	8/9/2018
Bis(2-chloroethyl)ether	ND	0.22		mg/Kg-dry	1	8/9/2018
Bis(2-ethylhexyl)phthalate	ND	1.1		mg/Kg-dry	1	8/9/2018
4-Bromophenyl phenyl ether	ND	0.22		mg/Kg-dry	1	8/9/2018
Butyl benzyl phthalate	ND	0.22		mg/Kg-dry	1	8/9/2018
Carbazole	ND	0.22		mg/Kg-dry	1	8/9/2018
4-Chloroaniline	ND	0.22		mg/Kg-dry	1	8/9/2018
4-Chloro-3-methylphenol	ND	0.42		mg/Kg-dry	1	8/9/2018
2-Chloronaphthalene	ND	0.22		mg/Kg-dry	1	8/9/2018
2-Chlorophenol	ND	0.22		mg/Kg-dry	1	8/9/2018
4-Chlorophenyl phenyl ether	ND	0.22		mg/Kg-dry	1	8/9/2018
Chrysene	ND	0.042		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	ND	0.042		mg/Kg-dry	1	8/9/2018
Dibenzofuran	ND	0.22		mg/Kg-dry	1	8/9/2018
1,2-Dichlorobenzene	ND	0.22		mg/Kg-dry	1	8/9/2018
1,3-Dichlorobenzene	ND	0.22		mg/Kg-dry	1	8/9/2018
1,4-Dichlorobenzene	ND	0.22		mg/Kg-dry	1	8/9/2018
3,3´-Dichlorobenzidine	ND	0.22		mg/Kg-dry	1	8/9/2018
2,4-Dichlorophenol	ND	0.22		mg/Kg-dry	1	8/9/2018
Diethyl phthalate	ND	0.22		mg/Kg-dry	1	8/9/2018
2,4-Dimethylphenol	ND	0.22		mg/Kg-dry	1	8/9/2018
Dimethyl phthalate	ND	0.22		mg/Kg-dry	1	8/9/2018
4,6-Dinitro-2-methylphenol	ND	0.42		mg/Kg-dry	1	8/9/2018
2,4-Dinitrophenol	ND	1.1		mg/Kg-dry	1	8/9/2018
2,4-Dinitrotoluene	ND	0.042		mg/Kg-dry	1	8/9/2018
2,6-Dinitrotoluene	ND	0.042		mg/Kg-dry	1	8/9/2018
Di-n-butyl phthalate	ND	0.22		mg/Kg-dry	1	8/9/2018
Di-n-octyl phthalate	ND	0.22		mg/Kg-dry	1	8/9/2018

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Date Reported: August 23, 2018
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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-018

Client Sample ID: B-9-0507
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Semivolatile Organic Compounds by GC/MS	**SW8270C (SW3550B)**		Prep Date: **8/9/2018**		Analyst: **CW**	
Fluoranthene	ND	0.042		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.042		mg/Kg-dry	1	8/9/2018
Hexachlorobenzene	ND	0.22		mg/Kg-dry	1	8/9/2018
Hexachlorobutadiene	ND	0.22		mg/Kg-dry	1	8/9/2018
Hexachlorocyclopentadiene	ND	0.22		mg/Kg-dry	1	8/9/2018
Hexachloroethane	ND	0.22		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	ND	0.042		mg/Kg-dry	1	8/9/2018
Isophorone	ND	0.22		mg/Kg-dry	1	8/9/2018
2-Methylnaphthalene	ND	0.22		mg/Kg-dry	1	8/9/2018
2-Methylphenol	ND	0.22		mg/Kg-dry	1	8/9/2018
4-Methylphenol	ND	0.22		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.042		mg/Kg-dry	1	8/9/2018
2-Nitroaniline	ND	0.22		mg/Kg-dry	1	8/9/2018
3-Nitroaniline	ND	0.22		mg/Kg-dry	1	8/9/2018
4-Nitroaniline	ND	0.22		mg/Kg-dry	1	8/9/2018
2-Nitrophenol	ND	0.22		mg/Kg-dry	1	8/9/2018
4-Nitrophenol	ND	0.42		mg/Kg-dry	1	8/9/2018
Nitrobenzene	ND	0.042		mg/Kg-dry	1	8/9/2018
N-Nitrosodi-n-propylamine	ND	0.042		mg/Kg-dry	1	8/9/2018
N-Nitrosodimethylamine	ND	0.22		mg/Kg-dry	1	8/9/2018
N-Nitrosodiphenylamine	ND	0.042		mg/Kg-dry	1	8/9/2018
2, 2'-oxybis(1-Chloropropane)	ND	0.22		mg/Kg-dry	1	8/9/2018
Pentachlorophenol	ND	0.042		mg/Kg-dry	1	8/9/2018
Phenanthrene	ND	0.042		mg/Kg-dry	1	8/9/2018
Phenol	ND	0.22		mg/Kg-dry	1	8/9/2018
Pyrene	ND	0.042		mg/Kg-dry	1	8/9/2018
Pyridine	ND	0.86		mg/Kg-dry	1	8/9/2018
1,2,4-Trichlorobenzene	ND	0.22		mg/Kg-dry	1	8/9/2018
2,4,5-Trichlorophenol	ND	0.22		mg/Kg-dry	1	8/9/2018
2,4,6-Trichlorophenol	ND	0.22		mg/Kg-dry	1	8/9/2018
PCBs	**SW8082A (SW3550B)**		Prep Date: **8/8/2018**		Analyst: **GVC**	
Aroclor 1016	ND	0.10		mg/Kg-dry	1	8/8/2018
Aroclor 1221	ND	0.10		mg/Kg-dry	1	8/8/2018
Aroclor 1232	ND	0.10		mg/Kg-dry	1	8/8/2018
Aroclor 1242	ND	0.10		mg/Kg-dry	1	8/8/2018
Aroclor 1248	ND	0.10		mg/Kg-dry	1	8/8/2018
Aroclor 1254	ND	0.10		mg/Kg-dry	1	8/8/2018
Aroclor 1260	ND	0.10		mg/Kg-dry	1	8/8/2018

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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-018

Client Sample ID: B-9-0507
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Pesticides		**SW8081B (SW3550B)**		Prep Date: **8/8/2018**		Analyst: **GVC**
4,4´-DDD	ND	0.0020		mg/Kg-dry	1	8/8/2018
4,4´-DDE	ND	0.0020		mg/Kg-dry	1	8/8/2018
4,4´-DDT	ND	0.0020		mg/Kg-dry	1	8/8/2018
Aldrin	ND	0.0020		mg/Kg-dry	1	8/8/2018
alpha-BHC	ND	0.0020		mg/Kg-dry	1	8/8/2018
alpha-Chlordane	ND	0.0020		mg/Kg-dry	1	8/8/2018
beta-BHC	ND	0.0020		mg/Kg-dry	1	8/8/2018
Chlordane	ND	0.020		mg/Kg-dry	1	8/8/2018
delta-BHC	ND	0.0020		mg/Kg-dry	1	8/8/2018
Dieldrin	ND	0.0020		mg/Kg-dry	1	8/8/2018
Endosulfan I	ND	0.0020		mg/Kg-dry	1	8/8/2018
Endosulfan II	ND	0.0020		mg/Kg-dry	1	8/8/2018
Endosulfan sulfate	ND	0.0020		mg/Kg-dry	1	8/8/2018
Endrin	ND	0.0020		mg/Kg-dry	1	8/8/2018
Endrin aldehyde	ND	0.0020		mg/Kg-dry	1	8/8/2018
Endrin ketone	ND	0.0020		mg/Kg-dry	1	8/8/2018
gamma-BHC	ND	0.0020		mg/Kg-dry	1	8/8/2018
gamma-Chlordane	ND	0.0020		mg/Kg-dry	1	8/8/2018
Heptachlor	ND	0.0020		mg/Kg-dry	1	8/8/2018
Heptachlor epoxide	ND	0.0020		mg/Kg-dry	1	8/8/2018
Methoxychlor	ND	0.0020		mg/Kg-dry	1	8/8/2018
Toxaphene	ND	0.042		mg/Kg-dry	1	8/8/2018
Metals by ICP/MS		**SW6020A (SW3050B)**		Prep Date: **8/6/2018**		Analyst: **MDT**
Aluminum	4400	23		mg/Kg-dry	10	8/6/2018
Antimony	ND	2.3		mg/Kg-dry	10	8/7/2018
Arsenic	9.6	1.1		mg/Kg-dry	10	8/6/2018
Barium	18	1.1		mg/Kg-dry	10	8/6/2018
Beryllium	ND	0.57		mg/Kg-dry	10	8/7/2018
Cadmium	ND	0.57		mg/Kg-dry	10	8/6/2018
Calcium	32000	68		mg/Kg-dry	10	8/6/2018
Chromium	10	1.1		mg/Kg-dry	10	8/6/2018
Cobalt	6.4	1.1		mg/Kg-dry	10	8/6/2018
Copper	18	2.9		mg/Kg-dry	10	8/6/2018
Iron	12000	34		mg/Kg-dry	10	8/6/2018
Lead	26	0.57		mg/Kg-dry	10	8/6/2018
Magnesium	18000	34		mg/Kg-dry	10	8/6/2018
Manganese	250	1.1		mg/Kg-dry	10	8/6/2018
Nickel	17	1.1		mg/Kg-dry	10	8/6/2018

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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-018

Client Sample ID: B-9-0507
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Potassium	930	34		mg/Kg-dry	10	8/6/2018
Selenium	1.7	1.1		mg/Kg-dry	10	8/6/2018
Silver	ND	1.1		mg/Kg-dry	10	8/6/2018
Sodium	140	68		mg/Kg-dry	10	8/6/2018
Thallium	ND	1.1		mg/Kg-dry	10	8/6/2018
Vanadium	31	1.1		mg/Kg-dry	10	8/6/2018
Zinc	69	5.7		mg/Kg-dry	10	8/6/2018
SPLP Metals by ICP/MS	**SW1312/6020A (SW3005A)**			Prep Date: **8/21/2018**		Analyst: **JG**
Selenium	ND	0.0040		mg/L	2	8/22/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	ND	0.020		mg/Kg-dry	1	8/6/2018
Cyanide, Total	**SW9012A**			Prep Date: **8/7/2018**		Analyst: **MD**
Cyanide	ND	0.32		mg/Kg-dry	1	8/7/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	7.85			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	22.6	0.2	*	wt%	1	8/6/2018

Qualifiers:
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HT - Sample received past holding time
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Date Reported: August 23, 2018
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ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-019

Client Sample ID: B-10-0103
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	0.73	0.036		mg/Kg-dry	1	8/9/2018
Acenaphthylene	0.76	0.036		mg/Kg-dry	1	8/9/2018
Anthracene	2.9	0.036		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	7.0	0.18		mg/Kg-dry	5	8/10/2018
Benzo(a)pyrene	6.1	0.18		mg/Kg-dry	5	8/10/2018
Benzo(b)fluoranthene	5.8	0.18		mg/Kg-dry	5	8/10/2018
Benzo(g,h,i)perylene	3.6	0.036		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	5.0	0.18		mg/Kg-dry	5	8/10/2018
Chrysene	6.8	0.18		mg/Kg-dry	5	8/10/2018
Dibenz(a,h)anthracene	1.7	0.036		mg/Kg-dry	1	8/9/2018
Fluoranthene	15	0.18		mg/Kg-dry	5	8/10/2018
Fluorene	1.4	0.036		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	3.6	0.036		mg/Kg-dry	1	8/9/2018
Naphthalene	0.44	0.036		mg/Kg-dry	1	8/9/2018
Phenanthrene	12	0.18		mg/Kg-dry	5	8/10/2018
Pyrene	13	0.18		mg/Kg-dry	5	8/10/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	9.7	0.96		mg/Kg-dry	10	8/6/2018
Barium	380	0.96		mg/Kg-dry	10	8/6/2018
Cadmium	1.7	0.48		mg/Kg-dry	10	8/6/2018
Chromium	31	0.96		mg/Kg-dry	10	8/6/2018
Lead	750	0.48		mg/Kg-dry	10	8/6/2018
Selenium	1.4	0.96		mg/Kg-dry	10	8/6/2018
Silver	ND	0.96		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	0.87	0.053		mg/Kg-dry	3	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.22			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	8.8	0.2	*	wt%	1	8/6/2018

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

STAT Analysis Corporation
2242 West Harrison St., Suite 200, Chicago, IL 60612-3766
Tel: (312) 733-0551 Fax: (312) 733-2386 STATinfo@STATAnalysis.com
Accreditations:IEPA ELAP 100445;ORELAP IL300001;AIHA-LAP, LLC 101160;NVLAP LabCode 101202-0

Date Reported: August 23, 2018
Date Printed: August 23, 2018

ANALYTICAL RESULTS

Client: GSG Consultants, Inc.
Work Order: 18080086 Revision 1
Project: Damen & Lake, Chicago, IL
Lab ID: 18080086-020

Client Sample ID: B-10-0709
Collection Date: 8/2/2018
Matrix: Soil

Analyses	Result	RL	Qualifier	Units	DF	Date Analyzed
Polynuclear Aromatic Hydrocarbons by GC/MS	**SW8270C (SW3550B)**			Prep Date: **8/9/2018**		Analyst: **CW**
Acenaphthene	ND	0.041		mg/Kg-dry	1	8/9/2018
Acenaphthylene	ND	0.041		mg/Kg-dry	1	8/9/2018
Anthracene	ND	0.041		mg/Kg-dry	1	8/9/2018
Benz(a)anthracene	0.088	0.041		mg/Kg-dry	1	8/9/2018
Benzo(a)pyrene	0.085	0.041		mg/Kg-dry	1	8/9/2018
Benzo(b)fluoranthene	0.067	0.041		mg/Kg-dry	1	8/9/2018
Benzo(g,h,i)perylene	0.060	0.041		mg/Kg-dry	1	8/9/2018
Benzo(k)fluoranthene	0.076	0.041		mg/Kg-dry	1	8/9/2018
Chrysene	0.089	0.041		mg/Kg-dry	1	8/9/2018
Dibenz(a,h)anthracene	ND	0.041		mg/Kg-dry	1	8/9/2018
Fluoranthene	0.15	0.041		mg/Kg-dry	1	8/9/2018
Fluorene	ND	0.041		mg/Kg-dry	1	8/9/2018
Indeno(1,2,3-cd)pyrene	0.056	0.041		mg/Kg-dry	1	8/9/2018
Naphthalene	ND	0.041		mg/Kg-dry	1	8/9/2018
Phenanthrene	0.087	0.041		mg/Kg-dry	1	8/9/2018
Pyrene	0.15	0.041		mg/Kg-dry	1	8/9/2018
Metals by ICP/MS	**SW6020A (SW3050B)**			Prep Date: **8/6/2018**		Analyst: **MDT**
Arsenic	6.3	1.1		mg/Kg-dry	10	8/6/2018
Barium	17	1.1		mg/Kg-dry	10	8/6/2018
Cadmium	ND	0.56		mg/Kg-dry	10	8/6/2018
Chromium	7.1	1.1		mg/Kg-dry	10	8/6/2018
Lead	34	0.56		mg/Kg-dry	10	8/6/2018
Selenium	1.2	1.1		mg/Kg-dry	10	8/6/2018
Silver	ND	1.1		mg/Kg-dry	10	8/6/2018
Mercury	**SW7471B**			Prep Date: **8/6/2018**		Analyst: **LB**
Mercury	ND	0.022		mg/Kg-dry	1	8/6/2018
pH (25 °C)	**SW9045C**			Prep Date: **8/3/2018**		Analyst: **RW**
pH	8.01			pH Units	1	8/3/2018
Percent Moisture	**D2974**			Prep Date: **8/3/2018**		Analyst: **VA**
Percent Moisture	21.4	0.2	*	wt%	1	8/6/2018

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits
B - Analyte detected in the associated Method Blank
HT - Sample received past holding time
* - Non-accredited parameter
RL - Reporting / Quantitation Limit for the analysis
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
H - Holding time exceeded

STAT Analysis Corporation

2242 W. Harrison Suite 200, Chicago, Illinois 60612 Phone: (312) 733-0551 Fax: (312) 733-2386
e-mail address: STATinfo@STATAnalysis.com

CHAIN OF CUSTODY RECORD

Nº: 916235 Page : 1 of 1

Company: GSG Consultants
Project Number: Client Tracking No.:
Project Name: Dover 1 Lake
Project Location: Chicago, IL
Sampler(s): TEK
Report To: Ted Cegray Phone: 630 994 2609
Emily McGonigle Fax: 312 733 5612
QC Level: 1 2 3 4 e-mail: tcegray@gsg.consultants.com

Quote No.:
P.O. No.:
Turn Around Time (Days): 1 2 3 4 (5-7) 10
Results Needed: / / am/pm

Client Sample Number/Description:	Date Taken	Time Taken	Matrix	Comp.	Grab	Preserv.	No. of Containers	TCL	RCRA Metals	PNAs	1,4 Dioxane	Additional Information:	Lab No.:
B-1-0305	8/2/18		S		X		4	X			X		001
B-1-011012	8/2/18		S		X		1		X	X	X		002
B-2-0204	8/2/18		S		X		1		X	X	X		003
B-2-010012	8/2/18		S		X		1		X	X	X		004
B-3-0305	8/2/18		S		X		1		X	X	X		005
B-3-010012	8/2/18		S		X		4	X			X		006
B-4-0204	8/2/18		S		X		1		X	X	X		007
B-4-010012	8/2/18		S		X		1		X	X	X		008
B-5-0305	8/2/18		S		X		4	X			X		009
B-5-010012	8/2/18		S		X		1		X	X	X		010
B-6-0103	8/2/18		S		X		1		X	X	X		011
B-6-09011	8/2/18		S		X		4	X			X		012
B-7-0103	8/2/18		S		X		1		X	X	X		013
B-7-010012	8/2/18		S		X		1		X	X	X		014
B-8-0103	8/2/18		S		X		4	X			X		015
B-8-08010	8/2/18		S		X		1		X	X	X		016
B-9-0103	8/2/18		S		X		1		X	X	X		017
B-9-0507	8/2/18		S		X		4	X			X		018
B-10-0103	8/2/18		S		X		1		X	X	X		019
B-10-0709	8/2/18		S		X		1		X	X	X		020

Relinquished by: (Signature) Date/Time: 8/2/18 2:55 pm
Received by: (Signature) Date/Time: 8/2/18 1455
Relinquished by: (Signature) Date/Time:
Received by: (Signature) Date/Time:
Relinquished by: (Signature) Date/Time:
Received by: (Signature) Date/Time:

Comments:

Preservation Code: A = None B = HNO_3 C = NaOH
D = H_2SO_4 E = HCl F = 5035/EnCore G = Other

Laboratory Work Order No.: K1808086

Received on Ice: Yes [X] No [ ]
Temperature: 4.1 °C

STAT Analysis Corporation

Sample Receipt Checklist

Client Name GSG

Date and Time Received: 8/2/2018 2:55:00 PM

Work Order Number 18080086

Received by: BAF

Checklist completed by: _____ 8/2/18
Signature | Date

Reviewed by: JDK 8/3/18
Initials | Date

Matrix: Carrier name Client Delivered

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels/containers?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container or Temp Blank temperature in compliance?	Yes ☑	No ☐	Temperature 4.1 °C
Water - VOA vials have zero headspace?	No VOA vials submitted ☒	Yes ☒	No ☒
Water - Samples pH checked?	Yes ☒	No ☒	Checked by: _____
Water - Samples properly preserved?	Yes ☒	No ☒	pH Adjusted? _____

Any No response must be detailed in the comments section below.

Comments: _____

Client / Person contacted: _____ Date contacted: _____ Contacted by: _____

Response: _____

Justice Kwateng

From: Emily McGonigle [emcGonigle@gsg-consultants.com]
Sent: Monday, August 20, 2018 1:41 PM
To: Justice Kwateng
Cc: Thaddeus Cagney
Subject: RE: Damen & Lake, Chicago, IL STAT 18080086

Justice,

Can we please run additional parameters for the following on a ***RUSH TAT***:

B-1-011012
- SPLP Selenium

B-6-0103
- SPLP Lead

B-6-09011
- SPLP Iron
- SPLP Manganese

B-8-0103
- SPLP Iron
- SPLP Lead

B-9-0103
- TCLP Lead

B-9-0507
- SPLP Selenium

Thank you,

Emily McGonigle, E.I.T.
GSG CONSULTANTS, INC.
630-994-2604 direct

PRELIMINARY ENVIRONMENTAL SITE ASSESSMENT

Proposed Damen Green Line Elevated Station
Chicago, Cook County, IL

Prepared for:

Perkins+Will
410 N. Michigan Avenue
Chicago, Illinois 60611

Prepared by:

623 Cooper Court • Schaumburg, IL 60173
Tel: 630.994.2600 • Fax: 312.733.5612

August 2018

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1.0 ACRONYMS AND ABBREVIATIONS

AAI	All Appropriate Inquiries
ACM	Asbestos Containing Material
BOL	Bureau of Land (IEPA)
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
EDR	Environmental Data Resources, Inc.
ESL	Environmental Survey Limit
FEMA	Federal Emergency Management Agency
P.G.	Professional Geologist
FINDS	Facility Index System/Facility Registry System
FIRM	Flood Insurance Rate Map
GSG	GSG Consultants, Inc.
HWAR	Hazard Waste Annual Report
IEMA	Illinois Emergency Management Agency
IEPA	Illinois Environmental Protection Agency
ISGS	Illinois State Geological Survey
SRP	Site Remediation Program
ISGS	Illinois State Geological Survey
ISWS	Illinois State Water Survey
LBP	Lead-Based Paint
LOC	Limits of Construction
LUST	Leaking Underground Storage Tank
MGP	Manufactured Gas Plant
M.P.	Milepost
MSL	Mean Sea Level
NFR	No Further Remediation
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
OSFM	Office of the Illinois State Fire Marshal
PESA	Preliminary Environmental Site Assessment
PIP	Potentially Impacted Property
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
ROW	Right-of-Way
SQG	Small Quantity Generator
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UST	Underground Storage Tank

2.0 EXECUTIVE SUMMARY

GSG has completed a Preliminary Environmental Site Assessment (PESA) for the proposed Chicago Transit Authority (CTA) elevated station at the intersection of Damen Avenue and Lake Street in Chicago, Cook County, Illinois. The overall project improvement will be the construction of a new station, elevated platform, stairs and elevators.

The PESA includes nine (9) throughout the study area. The study area covers a vacant lot at the southwest corner of N. Damen Avenue and W. Lake Street, portions of W. Lake Street east and west of N. Damen Avenue, and the immediately surrounding properties.

This report identifies and evaluates Recognized Environmental Conditions (RECs) and Potentially Impacted Properties (PIPs) that may be indicative of releases or potential releases of hazardous substances at the proposed project area.

The following tables presents a list of sites that were evaluated as part of this report. **Table 1** presents a list of sites along the project for which RECs/PIPs were identified. **Table 2** presents a list of sites along the project for which only *de minimis* conditions were identified. **Table 3** presents a list of sites along the project for which no RECs/PIPs or *de minimis* were identified. **Table 4** presents a list of sites adjacent, but on the project, that were identified on environmental databases or historic map reviews. Sites identified with RECs or PIPs may require additional investigations.

Table 1. The following sites along the project were determined to contain RECs:

Property Name	PESA Site	REC(s)	Regulatory Database(s)	Land Use
Standard Equipment Co.	2	Service center for industrial vacuum equipment, waste generator	UST, Chicago TANKS, RCRA-SQG, FINDS, ECHO, Historic Cleaners	Commercial
Henry Horner Homes	9	SRP Site, transformers	SRP, Institutional Controls, Engineering Controls,	Residential

Table 2. The following sites along the project were determined to contain *de minimis* conditions:

Property Name	PESA Site	*De minimis* Condition(s)	Land Use
Target property	1	Transformers	Vacant lot/transportation
Brook Electronics/Big Shoulders Coffee/La Fournette Bakery and Café	4	Historic fuel oil UST, transformers	Commercial
Residential property	6	Historic UST	Residential
Cell phone tower	8	Transformers	Communication

Table 3. The following sites along the project were determined not to contain RECs or *de minimis* conditions:

Property Name	PESA Site	Land Use
Damen Avenue	3	Transportation
Lake Street	5	Transportation
Landscaped area	7	Vacant lot

Table 4. The following additional sites, adjoining to but not on the project, were identified on environmental databases:

Property Name	REC(s), including *de minimis* conditions	Regulatory database(s)	Land Use
Chicagoland Beverage Company	USTs, ACM, LBP	Chicago TANKS	Commercial
Kinzie Industrial Development Corp.	LUST, ACM, LBP	LUST, Chicago TANKS	Commercial
George Snieder	Auto Repair facility, USTs, ACM, LBP	Chicago TANKS	Industrial
Avalotis Painting Co.	Waste generator, ACM, LBP	RCRA-CESQG, FINDS, ECHO	Industrial
Sudler Montessori Elementary School	Waste generator, USTs	RCRA-CESQG, Chicago TANKS	Education

Where REC(s) are indicated as present, a condition was noted that may be indicative of releases or potential releases of hazardous substances on, at, in, or to the site, as discussed in the text. Potential hazards were not verified otherwise assessed as part of this PESA. Site identified with RECs or PIPs may require additional investigations to determine soil handling and management during construction.

Where RECs are not indicated as present, radon, biological hazards (such as mold, medical waste, or septic waste), and non-agricultural pesticides and/or herbicides may still be of concern. No further investigation concerning the presence or use of these factors was conducted for this PESA.

For the purposes of this report, the following are considered to be *de minimis* conditions:

- Normal use of lead-based paint (LBP) on exteriors and interiors of buildings and structures
- Use of asbestos-containing materials (ACM) in building construction
- The presence of USTs with no reported releases
- Transformers in normal use, unless the transformers were observed to be leaking, appear on an environmental regulatory list, or were otherwise determined to pose a hazard not related to normal use

Radon and biological hazards are not considered in this PESA unless specifically noted. Although potential natural hazards, if present, are described in this report, they are not considered as RECs or *de minimis* conditions for the purposes of this report, and are therefore not listed in the tables above.

3.1 Introduction

This report presents the results of a Preliminary Environmental Site Assessment (PESA) for the proposed Chicago Transit Authority (CTA) elevated station at the intersection of Damen Avenue and Lake Street in Chicago, Cook County, Illinois. The overall project improvement will be the construction of a new station, elevated platform, stairs and elevators.

The project area is located on the near west side of the City of Chicago, on the east side of Cook County, IL. Noteworthy landmarks in the vicinity are the United Center, located 0.25 miles south, the Willis Tower, located approximately 2.1 miles to the south-southeast, Navy Pier and Lake Michigan, located approximately 3.4 miles to the east.

While this report provides an overview of potential environmental concerns, both past and present, the PESA is limited by the availability of information at the time of the assessment. It is possible that unreported disposal of waste or illegal activities impairing the environmental status of the project area may have occurred which could not be identified. The conclusions and recommendations regarding environmental conditions that are presented in this report are based on a scope of work authorized by the HNTB Corporation. Should additional information become available which differs significantly from our understanding of conditions presented in this report, we request that this information be brought to our attention so that we may reassess the conclusions provided herein.

This report identifies and evaluates RECs and PIPs that may be indicative of releases or potential releases of hazardous substances on, at, in, or to the proposed project. The report has been prepared using reasonably ascertainable sources, including historical and geological information including aerial photographs, U.S. Geological Survey (USGS) topographic maps, file information of the Illinois State Geological Survey (ISGS) and other state agencies, Sanborn fire insurance maps, and various other historical information sources. The regulatory database search consisted of a 1.0-mile search radius search for CERCLIS (Comprehensive Environmental Response, Compensation, and Liability Information System) and NPL (National Priority List) sites with a minimum 400-foot buffer zone for the remaining databases. An on-site visual reconnaissance including the target and adjoining properties with photographic documentation was completed as part of this assessment. The specific methods used to conduct the assessment are contained in "A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Infrastructure Projects" (Erdmann et al., 2014).

3.2 Topography

The 2012 USGS 7.5-minute Chicago Loop Quadrangle show the project area to be generally flat, gently sloping from west to east. On average, the project area is approximately 597 feet above sea level.

3.3 Geology

3.3.1 Bedrock Geology

According to the "Geologic Map of Illinois" (1:500,000; Kolata 2005) bedrock in the project area consists of Silurian dolomite. GSG reviewed several published documents in an effort to determine the regional geological setting in the area of the project area. The bedrock in the Chicago area is overlain by glacial drift that was deposited by Pleistocene glaciers that repeatedly covered the area and by the various high-level states of Lake Michigan. The Pleistocene strata which underlies the study area, as inferred from the "Surficial Geology of the Chicago Region" (Willman and Lineback, ISGS, 1970), consists of the Carmi Member of the Equality Formation. The Carmi Member consists of "largely quiet-water lake sediment; dominantly well bedded silt, locally laminated and containing thin beds of clay; local lenses of sand and sandy gravel along beaches."

3.3.2 Surficial Geology

Overlying the Pleistocene deposits are surficial soil deposits which according to the General Soil Map of DuPage and Part of Cook Counties, Illinois, (US Dept. of Agriculture, 1979), consist of Urban Land-Milford association soils. These are "built-up areas and deep, nearly level, poorly drained soils that have a silty and clayey subsoil; formed in glacial lake sediment".

According to the "Potential for Contamination of Shallow Aquifers in Illinois," (Richard C. Berg, John P. Kempton, ISGS, 1984), the project area is located within the E rating area. The geologic materials in the E rating area consist of "uniform, relatively impermeable silty or clayey till or other fine-grained materials more than 50 feet thick; no sand and gravel identified." The potential for contamination is "low" because of low hydraulic conductivity, 1 X 10^{-9} to 1 X 10^{-7} cm/sec and good attenuation capacities.

Based on the "Potential for Contamination of Shallow Aquifers by Surface and Near-Surface Waste Disposal" Plate, the Site is located within the D2 rating area. The geologic materials in the D2 rating area consist of "uniform, relatively impermeable silty or clayey till or other fine-grained materials more than 20 feet thick; no sand and gravel identified." The potential for contamination is "low" because of low hydraulic conductivity, 1 X 10^{-9} to 1 X 10^{-7} cm/sec and good attenuation capacities.

3.3 Hydrogeology

No site-specific hydrogeologic information was identified during the course of this assessment. Actual groundwater flow directions and depths in the vicinity of the project area cannot be determined without site-specific groundwater monitoring data. In lieu of this data, estimations were made herein based on surface gradient depicted on USGS topographic maps since it is generally recognized that shallow groundwater regionally mimics surface topography with flow toward existing surface water bodies such as rivers and creeks.

The Summary of the Geology of the Chicago Area (Willman 1971) describes shallow groundwater in the Chicago area as being limited to sand and gravel horizons in unconsolidated soil and fractured bedrock aquifers. The unconsolidated materials in this area consist primarily of clay with isolated lenses of sand material and are not considered aquifers. In the Chicago area, bedrock aquifers are found within Silurian, Ordovician and Cambrian formations, which are greater than 50 feet bgs.

GSG reviewed published geologic information to develop an understanding of site geology and anticipated groundwater flow direction. Groundwater flow can be locally impacted by utilities, wells, or other man-induced changes, but generally corresponds with surface topography. The 2012 USGS 7.5-minute Chicago Loop Quadrangle shows the project area to be sloping gently from west to east, generally toward Lake Michigan.

4.1 Man-Made Hazards

The project is located in an area consisting of a mixture of commercial, light industrial and residential properties, with some vacant parcels. Findings for each of the individual sites are described in the following subsections and illustrated on the referenced attachments. Field work for this assessment was conducted on July 24, 2018 and included a visual assessment only; no sampling or testing was performed. Site and vicinity photographs are included in **Appendix F.**

The following data gaps applicable to the entire project were identified:

- As specified in the agreed upon scope of work, title and environmental lien searches were not conducted as part of this PESA. However, based upon the long-term ownership and operation of the survey limits as roadway, this data gap does not represent a data failure and as a result is not expected to impact the results of this assessment.

- Aerial photographs provided information only for those specific times covered by the photographs as identified in the References and Sources Consulted section of this report. No records were available for intervening years and land uses other than those identified herein may have occurred in these years. The Aerial Photographs are included in **Appendix B**.

- GSG did not have physical access to private properties around the project area. Such properties could only be observed from public vantage points.

- GSG submitted Freedom of Information requests to various agencies where RECs were determined to exist. At the time of issue of this report, responses have not been received from all of those agencies. After receiving and reviewing the responses, GSG shall issue an addendum, if warranted. All Freedom of Information Act (FOIA) requests, responses, and any documents produced due to these requests can be found in **Appendix E**.

The findings and site-specific data gaps (if any) for each individual site are discussed in the following subsections.

4.1.1 Site 1 – Target Property

Target Property, 2001 W. Lake Street, Chicago. The site is a vacant, non-vegetated lot, and a portion of W. Lake Street. The lot is currently being utilized as a storage area for the construction activities currently taking place at the intersection of N. Damen Avenue and W. Lake Street. W. Lake street is a two-lane asphalt roadway, with parking lanes on each side. The CTA elevated Green Line tracks run over W. Lake Street. One

(1) pole-mounted transformer was located along the public alley on the south side of the site. No signs of staining or stressed vegetation were observed.

The available historical aerial photograph for 1938 depict the site as being occupied by elevated tracks running east-west through Lake Street, with an elevated station at the intersection of Lake Street and Damen Avenue. In the southwest corner of Lake Street and Damen Avenue is a multi-story building of undetermined use. The 1952 through 1984 Aerial photograph is similar to the 1938 photograph, with the exception that the only the multi-story building is present. Sometime between 1984 and 1988, the multi-story building was razed, leaving the site vacant until the current day.

Available Sanborn Fire Insurance Maps for the year 1916 depicts the site as being occupied by Chicago and Oak Park Elevated tracks through the center of W. Lake Street, with an elevated station with a ticket office at the intersection of W. Lake Street and N. Robey. The portion of the site located at the southwest corner of the intersection of Robey and Lake is occupied by five (5) three-story commercial properties, a two-story mixed use commercial and residential property labeled "CARPR SHOP," a two-story office building, and a garage. On the 1950 and 1975 Sanborn Maps, N. Robey has been renamed N. Damen Avenue, the elevated station has been removed, and the office, the garage and the two-story mixed-use building have been razed, and the remainder of the site is vacant. The corner of Damen Avenue and Lake Street is a vacant lot from 1988 through 2004.

The site does not appear in any other regulatory databases reviewed.

No visual evidence of spills, stressed vegetation, depressions, lagoons, surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, pits, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors were noted at the site during the July 24, 2018 site visit. Due to the absence of any buildings, neither ACM nor LBP are likely to be present at the site.

No RECs were identified on the target property.

The following *de minimis* condition has been identified for this site:

- One (1) pole mounted transformer is located in the public alley on the south side of the site.

4.1.2 Site 2 – Standard Equipment Company

Standard Equipment Co., 2033 W. Walnut Street, Chicago. The site is occupied by a warehouse building and a large parking lot. The property is utilized for the sale and rental of industrial sewer and street cleaning and vacuuming equipment. The warehouse building is located on Walnut Street, in the northwest corner of the site. The warehouse is utilized for the cleaning and service of the vehicles. The building is of brick, cinder block and metal construction. The remainder of the site is a parking lot which is utilized for vehicle

parking and storage. An AST with a pump is located on the east side of the parking lot. The tank is surrounded by guardrail to prevent accidental collisions.

Available historical aerial photographs from 1938 through 1962 depict the site as multi-story buildings of undetermined use. From 1972 through 1999, the buildings are slowly razed throughout the site, however the main buildings currently present at the site are visible in all of these photographs. The aerial photographs from the years 2007 through 2017 depict the structures currently present at the site.

The Sanborn Fire Insurance Map for the year 1916 depict this site as being occupied by a mixture of commercial, light industrial and residential properties, including: the American Picture Novelty Co. and a sauerkraut and vinegar manufacturer. The Sanborn Fire Insurance Map for the year 1950 depicts this site as being occupied by a mixture of commercial, light industrial and residential properties, including a metal stamping plant, a bag and burlap factory, a machine shop, an undertaker, a wholesale coffee and tea seller, an iron works and a structural steel shop. The Sanborn Fire Insurance Map for the year 1975 depicts this site as being occupied by a mixture of commercial, light industrial and residential properties, including a machine shop, Janis Plastics (a machine shop), and a stove parts warehouse. The Sanborn Fire Insurance Map for the years 1988 and 1991 depict this site as being occupied by a mixture of light industrial properties, a residential property and vacant parcels. The Janis Plastics factory has been razed, and the stove parts warehouse is now vacant. The Sanborn Fire Insurance Map for the year 1993 depicts this site as being occupied by a mixture of light industrial, a residential property and vacant parcels. The vacant stove parts warehouse has been razed. The Sanborn Fire Insurance Map for the year 2004 depicts this site as being occupied by a machine shop. The remainder of the site has been razed.

This property is listed under the name Standard Equipment Company, at the address 2033 W. Walnut Street, in the following databases: UST, Chicago TANKS, RCRA-SQG, FINDS and ECHO. The site is listed in the Chicago TANKS database for one (1) 1,000-gallon diesel AST with a dispenser. The tank was installed at the site on August 6, 2009. The site is listed in the UST database for one (1) 2,000-gallon heating oil tank. The tank was installed on December 30, 1958, and is listed as “exempt from registration.” The UST was removed on July 20, 1992. The site is listed as a generator of Class D001 (ignitable) wastes. No violations were identified in relation to this site.

The site is listed under the name University Health Science, at the address 2012 W. Lake Street, in the Chicago TANKS database. The site is listed as having had one (1) 5,000-gallon fuel oil UST installed on September 25, 1952. The UST was removed on April 28, 1986.

The site is listed under the name Russell Aubrey, at the address 2042 W. Lake Street, in the Historic Cleaners database. The site is listed for the year 1923 and is classified as “Laundries.”

No visual evidence of spills, stressed vegetation, depressions, surface impoundments, stained soil or pavement, water discoloration, fill, protruding pipes, pipelines, drums, monitoring wells, pits, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors were noted at the site

during the July 24, 2018 site visit. Based on the age of the building, both ACMs and LBPs are suspected to be present.

The following RECs have been identified for this site:

- The site is utilized for the sales, service and rental of industrial vacuuming cleaning vehicles
- The site is listed as a generator of ignitable wastes

The following *de minimis* conditions have been identified for this site:

- One (1) 1,000-gallon diesel fuel AST and dispenser was observed in the parking lot on the east side of the site.
- Potential presence of ACMs and LBPs

4.1.3 Site 3 – N. Damen Avenue

North Damen Avenue, Chicago. This site consists of N. Damen Avenue, from the public alley between W. Lake Street and W. Maypole Avenue on the south to the public alley between W. Lake Street and W. Walnut Street on the north. The site consists of a two-lane asphalt roadway, with a right turn lane at the intersection with Lake Street, bike riding lanes, and parking lanes on each side of the street. Drainage is directed toward the concrete curbs and inlets within N. Damen Avenue.

Available historical aerial photographs depict the site as a roadway from at least 1938 until the present.

Available Sanborn Fire Insurance Maps depict the site as a roadway from at least 1916. The 1916 Map identifies the site as "N. Robey." All of the remaining Sanborn Maps identify the site as "N. Damen Avenue."

The site does not appear in any regulatory database reviewed.

No visual evidence of spills, stressed vegetation, depressions, surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, pits, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors were noted at the site during the July 24, 2018 site visit. Due to the lack of buildings at the site, ACM and LBP are not suspected to be present at the site.

No RECS or *de minimis* conditions have been identified for this site.

4.1.4 Site 4 – Brook Electrical Supply/Big Shoulders Coffee/La Fournette Bakery & Café

Brook Electrical Supply/La Fournette Bakery & Café, 1938 to 1958 W. Lake Street, Chicago. The site is a two-story multi-occupant commercial property of brick and cinderblock construction, with a loading and employee parking area on the north side of the building along the public alley. The building is occupied by: Brook Electrical Supply, a commercial electrical parts distributor; Big Shoulders Coffee, a retail coffee shop;

and La Fournette Bakery and Café, a French-style bakery. The building is utilized for retail operations, warehouse storage and office space. Six (6) pole-mounted transformers, in groups of three (3), were located in the public alley on the north side of the building. No signs of staining or stressed vegetation were observed.

The available aerial photographs for the years 1938 through 1978 depict the site as being occupied by six (6) multi-story buildings of undetermined use. Sometime between 1978 and 1984, two of the buildings along Lake Street have been razed. Sometime between 1984 and 1988, the buildings at the southwest corner of the site have been razed. Sometime between 1988 and 1994, a multi-story building was built in the northwest corner of the site. Sometime between 1994 and 1999, the entire site was razed. Sometime between 1999 and 2007, the building currently present at the site are under construction. The building was completed sometime between 2007 and 2011.

The available Sanborn Fire Insurance Map for the year 1916 depict the site as seven (7) one-story commercial properties, four (4) two-story commercial properties, three (3) three-story commercial properties, five (5) one-story sheds and two (2) two-story sheds. One (1) of the three-story buildings is labeled "PHOTOS" and one (1) is labeled "SIGN PAINTING." The 1950 Sanborn Map shows the sheds on the north side were razed. The 1975 Sanborn Map depicts three (3) garages have been added to the north side of the properties at 1944, 1950 and 1952 W. Lake Street. The 1988 Map depicts the properties from 1946 through 1958 W. Lake Street have been razed. The property located at 1940 W. Lake is labeled "Machine Shop." This portion of the site remains vacant until the 1993 Sanborn Map when a two-story cinder block and brick building has been constructed at 213 N. Damen, in the northwest corner of the site. Sometime between 1993 and 2004, the entire site was razed.

The site is listed in the CHICAGO TANKS database for the address 1952 W. Lake street, under the name J.A. Brown. The site was listed for the installation of one (1) 275-gallon fuel oil UST on July 16, 1958. No date is listed for the removal of the UST.

No visual evidence of spills, stressed vegetation, depressions, surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, pits, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors were noted at the site during the July 24, 2018 site visit. based on the age of the building, neither ACM nor LBP are likely to be present at the site.

No RECs were identified for the site.

The following *de minimis* conditions have been identified for this site:

- The potential presence of one (1) 275-gallon fuel oil UST
- Six (6) Pole-mounted transformers on the north side of the alley on the north side of the building.

4.1.5 Site 5 – W. Lake Street

This site consists of W. Lake Street. The site extends from approximately 1943 W. Lake Street on the east to approximately 2029 W. Lake Street. The site is a two-lane asphalt roadway with parking lanes on the north and south sides. The CTA elevated Green Line tracks run over the street. Drainage is directed toward the concrete curbs and inlets within W. Lake Street.

Available historical aerial photographs depict the site as a roadway from at least 1938 until the present.

Available Sanborn Fire Insurance Maps depict the site as a roadway from at least 1916. In all of the Sanborn Maps, the site is identified as "W. Lake Street." Elevated railroad tracks are present through the center of W. Lake Street. In all of the Sanborn Maps, the tracks are labeled "Chicago and Oak Park Elevated Railroad."

The site does not appear in any regulatory database reviewed.

No visual evidence of spills, stressed vegetation, depressions, surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, pits, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors were noted at the site during the July 24, 2018 site visit. Due to the lack of buildings present at the site, neither ACM and LBP are not suspected to be present at the site.

No RECS or *de minimis* conditions have been identified for this site.

4.1.6 Site 6 – Residential Property

Residential property, 1939-1949 W. Lake Street, Chicago. The site is a four-story multi-family residential property, with a parking lot and a one-story equipment room on the south side of the site. The buildings are of brick and cinder block construction. Three (3) pole-mounted transformers were located in the public alley on the south side of the parking lot. No signs of staining or stressed vegetation were observed.

Available aerial photographs depict the site from sometime before 1938 until sometime between 1952 and 1962 as being occupied by two (2) multi-story buildings on the north side of the site, and a one-story building on the south side. From sometime between 1952 and 1962, through sometime before 2007, the site is occupied by a large multi-story building and landscaped areas. Sometime between 2007 and 2011, the structures that are currently present at the site have been constructed.

The 1916 Sanborn Fire Insurance Map depicts the site as two (2) two-story buildings, three (3) three-story buildings and a two-story shed, and two (2) one-story buildings. One (1) of the two-story buildings, 1939 W. Lake, is labeled "Cabinet Shop," and the one-story building to the south of it is labeled "Elec. Motor." The 1950 Sanborn Map depicts the site and adjacent properties as being similar to the 1916 Map, with the exception that the buildings south of 1939 S. Lake have been razed, the building present at 1941 W. Lake

Street is labeled “Harness,” and a garage is present to the south. The remaining Sanborn Maps depict the site as an undeveloped potion of the Henry Horner Homes housing complex.

The site is listed in the Historic Cleaners database, at the address 1939 W. Lake Street, under the name Wing New. The site is listed for the year 1928, with the type “Chinese Laundries.” The site is listed in the Chicago TANKS at the address 1939 W. Lake Street, under the name “New Apartment Building.” The site is listed for a diesel tank of unknown size. It is not reported when the UST was installed or if it has been removed.

No visual evidence of spills, stressed vegetation, depressions, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, pits, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors were noted at the site during the July 24, 2018 site visit. Based on the age of the building, neither ACM nor LBP are likely to be present at the site.

No RECs have been identified for this site.

The following *de minimis* conditions has been identified for this site:

- A diesel UST was present at the site during the construction of the building currently present at the site. It is unknown if this UST is still present at the site.
- Three (3) pole-mounted transformers were present in the public alley on the south side of the site. No staining or stressed vegetation were observed in the area of the transformers.

4.1.7 Site 7 – Landscaped Area

Landscaped area, 1951 W. Lake Street, Chicago. The site is a flat landscaped area enclosed within a wrought iron fence.

Available historical aerial photographs from 1938 until sometime before 1962 depict the site as being occupied by multi-story buildings. Due to the poor quality of the photographs, it cannot be determined exactly how many buildings are present. From sometime before 1962 through 1999 depict the site as being occupied by a multi-story residential apartment building and associated landscaped areas. The remaining properties are depicted as landscaped areas.

Available Sanborn Fire Insurance Maps from the years 1916 and 1950 depict the site as being occupied by occupied by three (3) three-story commercial properties, one (1) two-story commercial property, six (6) two-story residential properties and one (1) one-story residential property. The property located at 1959 W. Lake is labeled “DRUG.” All of the remaining maps show the site as being occupied by the Henry Horner Homes, a seven-story 65-unit residential apartment complex, constructed in 1956.

The site does not appear in any regulatory database reviewed.

No visual evidence of spills, stressed vegetation, depressions, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, pits, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors were noted at the site during the July 24, 2018 site visit. Due to the lack of buildings at the site, neither ACM and LBP are suspected to be present at the site.

No RECS or *de minimis* conditions have been identified for this site.

4.1.8 Site 8 – Cell Phone Tower

Cell Phone Tower, 146 N. Damen Avenue, Chicago. The site is occupied by two (2) cell phone towers and a landscaped area. Each of the cell phone towers has a one-story brick and cinder block equipment building and is enclosed within a chin-link fence. The landscaped area site is enclosed within a chain-link fence.

Available historical aerial photographs from 1938 to 1962 depict the site as a multi-story building, with an associated parking lot on the south side of the building. The aerial photographs between 1972 and 1984 depict the site as a vacant lot. Sometime between 1988 and 1994, the current site structures were built.

The 1916 Sanborn Fire Insurance Map depicts the sit as a two-story residential property and a one-story commercial property. The 1950 Sanborn Map depicts the site as a three-story building labeled "Wall Paper Warehouse." The Sanborn Maps from between 1975 and 1993 depict the site as a vacant lot. The 2004 Sanborn Map depicts the current site structures.

No visual evidence of spills, stressed vegetation, depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, pits, solid waste, transformers, non-petroleum chemical use or storage, or unusual or noxious odors were noted at the site during the July 24, 2018 site visit. Based on the ages of the building present at the site, neither ACM nor LBP are likely to be present.

No RECs or *de minimis* conditions were identified for this site.

4.1.9 Site 9 – Henry Horner Homes

Henry Horner Homes, 2010 to 2066 W. Randolph Street, Chicago. The site is utilized as interconnected single-family two-story residential properties, with attached garages and associated landscaped areas. The buildings are all of brick and cinder block construction. One (1) pole-mounted transformer was present on N. Seeley Street on the east side of the site. No signs of staining or stressed vegetation were observed.

Available historical aerial photographs from 1938 to until 1952 depict the site as being occupied by multi-story buildings. Aerial photographs from the years 1962 through 1994 depict the site as being occupied by

two (2) multi-story residential properties and landscaped areas. All the remaining photographs depict the structures currently present at the site.

Available Sanborn Fire Insurance Maps for 1916 depicts the site as being occupied by a mixture of commercial and residential properties, including a wagon shop, a carpenter's shop, and the William Murdock Company, a gravel roofing company. The Sanborn Maps for the year 1950 is largely unchanged, with that the carpenter shop is now a rubber goods manufacturer, and an auto parts distributor is now present at 2019 W. Lake Street. Sanborn Maps for the years 1975 through 1993 depict the site as part of the Governor Henry Horner Homes Extension. The buildings are eight-story residential apartment buildings of brick and cinderblock construction. Sanborn Maps for 2004 depict the structures currently present at the site.

The site was listed in several databases under various addresses and names. Under the name Henry Horner Homes Redevelopment Area C, at the address 1999 West Lake Street, the site is listed in the SRP, Engineering Controls and Institutional Controls databases. The site was enrolled in the SRP on January 7, 2008. A comprehensive No Further Remediation letter was issued for the site with Engineering Controls on August 10, 2010. The controls consisted of concrete and 3 feet of clean fill. A comprehensive No Further Remediation letter was issued for the site with Institutional Controls on August 10, 2010. The controls consisted of a residential or commercial land use restriction. A Comprehensive No Further Remediation Letter was issued for the entire site on February 15, 2017.

Under the name Brown Joh, at the address 2019 W. Lake Street, the site is listed in the Chicago TANKS and Historic Auto databases. One (1) 1,000-gallon gasoline UST was installed at the site on July 9, 1951. No date for the removal of the UST was listed in the available information. The site was listed as "Brown John," as an "Automobile Repairing" site for the year 1928.

No visual evidence of spills, stressed vegetation, depressions, mounding or soil piles, lagoons or surface impoundments, stained soil or pavement, water discoloration, fill, storage tanks (above or underground), pumps or dispensers, protruding pipes, pipelines, drums, monitoring wells, pits, solid waste, non-petroleum chemical use or storage, or unusual or noxious odors were noted at the site during the July 24, 2018 site visit. Based on the age of the buildings present, neither ACM nor LBP are likely to be present at the site.

The following REC was identified for the site:

- The site is listed in the SRP, with institutional and engineering controls.

The following *de minimis* condition has been identified for this site:

- One (1) pole mounted transformer is located along N. Seeley Avenue on the east side of the site.
- One (1) 1,000-gallon gasoline UST was listed are being present at the site. It is unknown if the UST is still present at the site.
- An automobile repair facility was present at 2019 West Lake Street.

4.2 Other Potential Man-Made Hazards

GSG conducted a search of federal, state, and other environmental databases for sites with reported environmental concerns on sites adjoining (but not along) the proposed project. For certain resources (NPL, CERCLIS), the search distances were expanded in the judgment of the environmental professional. Based on this expanded search, three (3) sites were found to be within 1 mile of the target property:

- American Plating, 1820 W. Lake Street, approximately 0.2 miles east of the target property. The site is listed in the SEMS database, but is classified as "Not in the NPL" and "Referred to Removal."
- Midwest Electrical Manufacturing Corp., 1693 W. Walnut, approximately 0.4 miles east of the target property. The site is listed in the SEMS-Archive, CORRACTS, LUST, Engineering Controls, Institutional Controls, SRP, RCRA-NonGen/NLR, and 2020 COR Action databases. The site is listed as "Not on the NPL" and "Deferred to RCRA." The site also is enrolled in the SRP and a No Further Remediation letter was issued on October 7, 1999.
- Advanced Process Sup., located at 400 N. Noble Street, approximately 0iv.8 miles east-northeast of the target property. The site is listed in the SSU database, but no other information was provided.

There are five (5) sites that are adjacent to adjoining properties that are listed on various databases.

4.2.1 Site A – Chicagoland Beverage Company

Chicagoland Beverage Company, 2056 W. Walnut Street, Chicago. The site is a one- and two-story brick and cinderblock warehouse and office building. The site is utilized as office space and as a warehouse for a beverage distributor.

Available historical aerial photographs from 1938 through 2017 depict the site as multi-story building and warehouse buildings. Most of the structures currently present at the site were built between 1952 and 1962. The remaining buildings were built between 1994 and 1999.

Available Sanborn Fire Insurance Maps from the year 1916 and 1950 depict the site as residential properties. The Sanborn Maps from 1975 through 1993 depict the site as "Machine Shop," of cinderblock and brick construction, built in 1954.

The site is listed under various names at various addresses. The site is listed in the UST and BOL databases under the name Lucky Penny Metal Processing, at the address 2042 W. Walnut Street. The site is listed for one (1) 1,500-gallon heating oil tank. The tank is listed as "Exempt from registration," and it is unknown if the UST is still present at the site.

The site is listed in the Chicago TANKS database under the name L&M Machine Company, at the address 2042 W. Walnut Street. The site is listed for one (1) 1,000-gallon fuel oil tank that was installed on June 22, 1954. The current status of the UST is unknown.

The site is listed in the Chicago TANKS database under the name Enterprise Brass Foundry at the address 2038 W. Walnut Street. The site is listed for one (1) 1,000-gallon fuel oil tank that was installed on September 7, 1950. The current status of the UST is unknown.

No RECs were identified for this site.

The following *de minimis* conditions have been identified for this site:

- Three (3) USTs are listed as being present at the site: one (1) 1,500-gallon heatng oil tank; and two (2) 1,000-gallon fuel oil tanks. The 1,500-gallon UST is listed as "Exempt from registration," and no information regarding the current status of the remaining USTs. It is unknown if any of these tanks have been removed from the site.
- Based on the age of the building, both ACMs and LBPs are suspected to be present.

4.2.2 Site B – Kinzie Industrial Development Corporation

Kinzie Industrial Development Corporation, 2000-2034 West Walnut, Chicago. The site is a one-story brick and cinderblock warehouse and office building and a fenced in parking lot. The building appears to be vacant, and the parking lot appears to be used by persons unknown.

Available historical aerial photographs from 1938 through 1984 depict the site as being occupied by multiple multi-story warehouse buildings. Sometime between 1984 and 1988 the buildings in the parking lot portion of the site were razed. Sometime between 1999 and 2007, a multi-story building was constructed in the parking lot on the east side of the site. The building was razed between 2014 and 2017.

Available Sanborn Fire Insurance Maps from the years 1916 and 1950 depict the site as a mix commercial, residential and light industrial properties, including a "Concrete Mixers Warehouse" at 2026 W. Walnut. The Sanborn Maps for 1975 depict a one-story commercial building on the west side and a one-story commercial building on the east side. The remaining Sanborn Maps depict only the building on the west side being present at the site. All remaining buildings have been razed.

The site is listed in several databases under various names and addresses. The site is listed in the LUST database under the name Kinzie Industrial Development Corporation at the address 2000 to 2034 West Walnut Street. LUST incident 951894 was declared on October 23, 1995 for a release of an unknown material. No 20-Day Report, 45-Day Report or No Further Remediation letter have been issued for the site.

The site is listed in the Chicago TANKS database under the name City of Chicago for the address 2000 W. Walnut Street. The site was listed for the installation of two (2) fuel oil USTs: one (1) 5,000-gallon tank and one (1) 3,000-gallon tank. The tanks were removed on April 30, 1979.

The site is listed in the Chicago TANKS and UST database under the name Vacant Property for the address

2034 W. Walnut Street. The site is listed for the removal of one (1) 500-gallon heating oil UST in March 19, 2002. It was not reported when the UST was installed.

The following REC was identified for this site:

- LUST incident 951894 was declared for the site on October 23, 1995, for a release of an unknown quantity of an unknown material. A No Further Remediation letter has not been issued for the site.

The following *de minimis* conditions have been identified for this site:

- Based on the age of the building, both ACMs and LBPs are suspected to be present.

4.2.3 Site C – George Snieder

George Snieder, 215 N. Damen, Chicago. The site is a one-story brick and cinderblock warehouse building. The building appears to be vacant, but there are signs on the exterior of the building indicating that the site may have recently been utilized as an automotive repair facility.

Available historical aerial photographs from 1938 through 2017 depict the site as a warehouse building.

Available Sanborn Fire Insurance Maps from the year 1916 depict the site as two (2) two-story residential properties. The 1950 Sanborn Map depict the site as a private warehouse, with a boiler room and one (1) UST of unknown size and capacity. The Sanborn Maps from 1975 through 1993 depict the site as "Contractor's Storage," and the UST is no longer depicted. The Sanborn Maps for 2002 and 2004 depict the site as a warehouse.

The database search indicated that the site was listed in the Chicago TANKS database. According to the information provided, one (1) 1,100-gallon gasoline UST was present at the site for an unknown period of time before being abandoned in place on May 14, 1999.

The following REC was identified for this site:

- The site is vacant, but signs on the exterior indicate that it may have recently been utilized as an automobile repair facility.

The following *de minimis* conditions have been identified for this site:

- One (1) 1,100-gallon gasoline UST was abandoned in place at the site on May 14, 1999.
- Based on the age of the building, both ACMs and LBPs are suspected to be present.

4.2.4 Site D – Avalotis Painting Co., Inc.

Avalotis Painting Co., Inc., 1931 W. Lake Street, Chicago. The site is currently occupied by a two-story warehouse building, with an asphalt parking lot on the east side of the building and a fenced in area on the

west. The building is of brick and cinderblock construction.

Available historical aerial photographs from 1938 through 2017 depict the site as being occupied by a two-story warehouse style building.

Available Sanborn Fire Insurance Maps for the year 1916 depict the site as being occupied by a two-story office building, a two-story building labeled “wire works” and a two-story building labeled “sheet metal works.” All remaining Sanborn Maps depict the site as one (1) two-story building labeled “sheet metal works.” The one-story office building has been razed.

The site is listed in the RCRA-CESQG, FINDS, and ECHO databases. The site is listed as being a generator of the following waste: class D001 (ignitable waste); and class D035 (methyl ethyl ketone). No violations were reported for this site.

Due to the date of construction of the building present at the site, ACM and LBP are suspected to be present at the site.

The following REC has been identified for this site:

- The site is a generator of ignitable waste and methyl ethyl ketone

The following *de minimis* conditions was identified for this site:

- Based on the age of the building, both ACMs and LBPs are suspected to be present.

4.2.5 Site E - Sudler Montessori Elementary School

Sudler Montessori Elementary School, 2022 W. Washington, Chicago. The site is currently occupied by the Sudler Montessori School, a two-story school of brick and cinderblock construction.

Available historical aerial photographs for the years 1938 and 1952 depict the site as being occupied by multiple single- and multi-story buildings. All the remaining photographs depict the structures currently present at the site.

Sanborn Fire Insurance maps for the years 1916 and 1950 depict the site as multi-story single family residential properties. All the remaining Maps depict the site as a two-story school building.

The site is listed in several databases under several names and addresses. The site is listed in the Chicago TANKS database under the name J. H. Wallace, at the address 2028 W. Washington Street. The site was listed for in installation of one (1) 1,000-gallon fuel oil tanks on July 7, 1952. No information is listed about the current status of the tank.

The site is listed in the RCRA-CESQG database under the name Sulder Henry School, at the address 2022 W. Washington. The site is listed as a generator of the following wastes: cadmium (class D006); lead (class D008); and mercury (class D009). No violations were reported for this site.

The site is listed in the Chicago TANKS database under the name Chicago Public Schools, at the address of 2022 W. Washington. The site was listed for the installation of one (1) 7,500-gallon fuel oil tanks on June 2, 1958. No information is listed about the current status of the tank.

Due to the date of construction of the building present at the site, ACM and LBP are not suspected to be present at the site.

The following REC has been identified for this site:

- The site is a registered hazardous waste generator.

The following de minimis condition has been identified for this site:

- Two (2) fuel oil USTs are listed as having been installed at the site in 1952 and 1958, respectively. There is no information regarding the current status of these USTs.

4.3 Natural Hazards

4.3.1 Wetlands

The U.S. Fish and Wildlife Service National Wetlands Inventory Map (https://www.fws.gov/wetlands/Data/Mapper.html) did not indicate the presence of wetlands in close proximity to the project area.

4.3.2 Floodplains

According to the EDR Database search, the Federal Emergency Management Agency (FEMA) does not indicate the presence of a 100-year floodplain within the project area. The Overview Map of the Environmental Data Resources Report, included in **Appendix D**, shows the project area in relation to the 100-year flood zone. FEMA maps typically do not reflect potential local drainage problems or the ability of the local storm water management system to convey the surface water runoff created by storms or other occurrences.

4.3.3 Landslides

GSG reviewed the Illinois State Geological Survey website (www.isgs.illinois.edu) to identify if any landslide data could be identified and no information was found. Topographic and aerial maps, received from EDR Database Search were searched between the years 1939 to 2012. None of the maps displayed any landslide information for the project area.

4.3.4 Mine Subsidence

As shown on the ISGS Coal Mines in Illinois Viewer (http://isgs.illinois.edu/ilmines), the closest mine is located approximately 25.0 miles southwest of the project area. Therefore, mining is not a concern.

4.3.5 Seismicity

GSG reviewed several ISGS publications in an effort to describe the regional geological setting in the project area, inclusive of the survey limits at the individual crossings. Site-specific geologic information was not identified during the course of this assessment.

The 2014 U.S. Geological Survey (USGS) National Seismic Hazard Maps display earthquake ground motions for various probability levels across the United States and are applied in seismic provisions of building codes, insurance rate structures, risk assessments, and other public policy (http://earthquake.usgs.gov/hazards/products).

The 2014 U.S. Geological Survey National Seismic Hazard Maps present probabilistic ground motion for Peak Ground Acceleration (PGA), 1Hz (1.0 second SA), and 5Hz (0.2 second SA) (https://earthquake.usgs.gov/hazards/hazmaps/conterminous/index.php#2014). According to 2014 U.S. Geological Survey National Seismic Hazard Maps for the project area, on the 1 second Spectral Acceleration (SA) with 10 % probability of exceedance in 50 years map the project area is rated as 0.02 to 0.03 (on the scale from 0 to >0.4), on the 2 second Spectral Acceleration (SA) with 10 % probability of exceedance in 50 years map the project area is rated as 0.04 to 0.06 (on the scale from 0 to >0.8) and on the Peak Ground Acceleration (PGA) with 2% probability of exceedance in 50 years map the project area is rated as 0.02-0.04 (on the scale from 0 to > 0.8).

5.0 ENDORSEMENTS

8/24/18

Approved By: Date

Ala Sassila, PhD, P.E., Program Quality Manager

8/24/18

Reviewed By: Date

Ted Cagney, L.P.G., Geologist

8/24/18

Prepared By: Date

Emily McGonigle, E.I.T., Civil Engineer

6.0 CONCLUSIONS

1. RECs were identified at the following sites along the project:

   - Site 2 – Standard Equipment Co.: Sales and service of industrial vacuum trucks, waste generator
   - Site 9 – Henry Horner Homes: SRP site with institutional and engineering controls

2. *De minimis* conditions were identified at four (4) sites along the project area.

3. No RECs or *de minimis* conditions were identified at three (3) sites along the project area.

4. Other properties that appear on environmental databases as listed in the text were identified on sites adjacent to the proposed project:

   - Site A – Chicagoland Beverage Company: Historic USTs
   - Site B – Kinzie Industrial Development Company: Open LUST incident
   - Site C – George Snieder: Vacant auto repair facility, historic USTs
   - Site D – Avalotis Painting Co.: Waste generator
   - Site E – Sudler Montessori Elementary School: Waste generator, historic USTs

5. For the purposes of this report, the following are considered to be *de minimis* conditions:

   - Normal use of lead-based paint (LBP) on exteriors and interiors of buildings and structures

   - Use of asbestos-containing materials (ACM) in building construction

   - The presence of ASTs and/or USTs with no reported releases

   - Transformers in normal use, unless the transformers were observed to be leaking, appear on an environmental regulatory list, or were otherwise determined to pose a hazard not related to normal use

7.0 REFERENCES AND SOURCES CONSULTED

1889, 1891, 1900, and 1901 – Historical Topographic Map, 15-minute Chicago Quadrangle, EDR Inc., Milford, CT

1916, 1950, 1975, 1988, 1991, 1993, 2002, and 2004 – Sanborn Fire Insurance Map, EDR, Milford, CT

1929, 1953, 1963, 1972, 1978/1980, 1993, 1997 and 2012 – Historical Topographic Map, 7.5-minute Chicago Loop Quadrangle, EDR Inc., Milford, CT

1929, 1953, 1963, 1972, 1978/1980, 1993, 1997 and 2012 – Historical Topographic Map, 7.5-minute Englewood Quadrangle, EDR Inc., Milford, CT

1938, 1952, 1962, 1972, 1978, 1984, 1988, 1994, 1999, 2007, 2011, 2014, and 2017 – Aerial Photograph Map, EDR Aerial Photo Decade Package, Milford, CT

1950 – Surficial Geology of the Chicago Region Map (Willman and Lineback, Illinois State Geological Survey, 1970.)

1984 – Potential for Contamination of Shallow Aquifers from Land Burial of Municipal Waste, Richard C. Berg, John P. Kempton, Circ. 532, Illinois State Geological Survey, 1984

2011 – United States Geological Survey. Mineral Resources Online Spatial Data Geology by State. http://tin.er.usgs.gov/geology/state/

2011 – U.S. Geological Survey and Illinois Environmental Protection Agency. Source Water Assessment Program for Illinois: http://www.epa.illinois.gov/topics/water-quality/watershed-management/resource-assessments/index

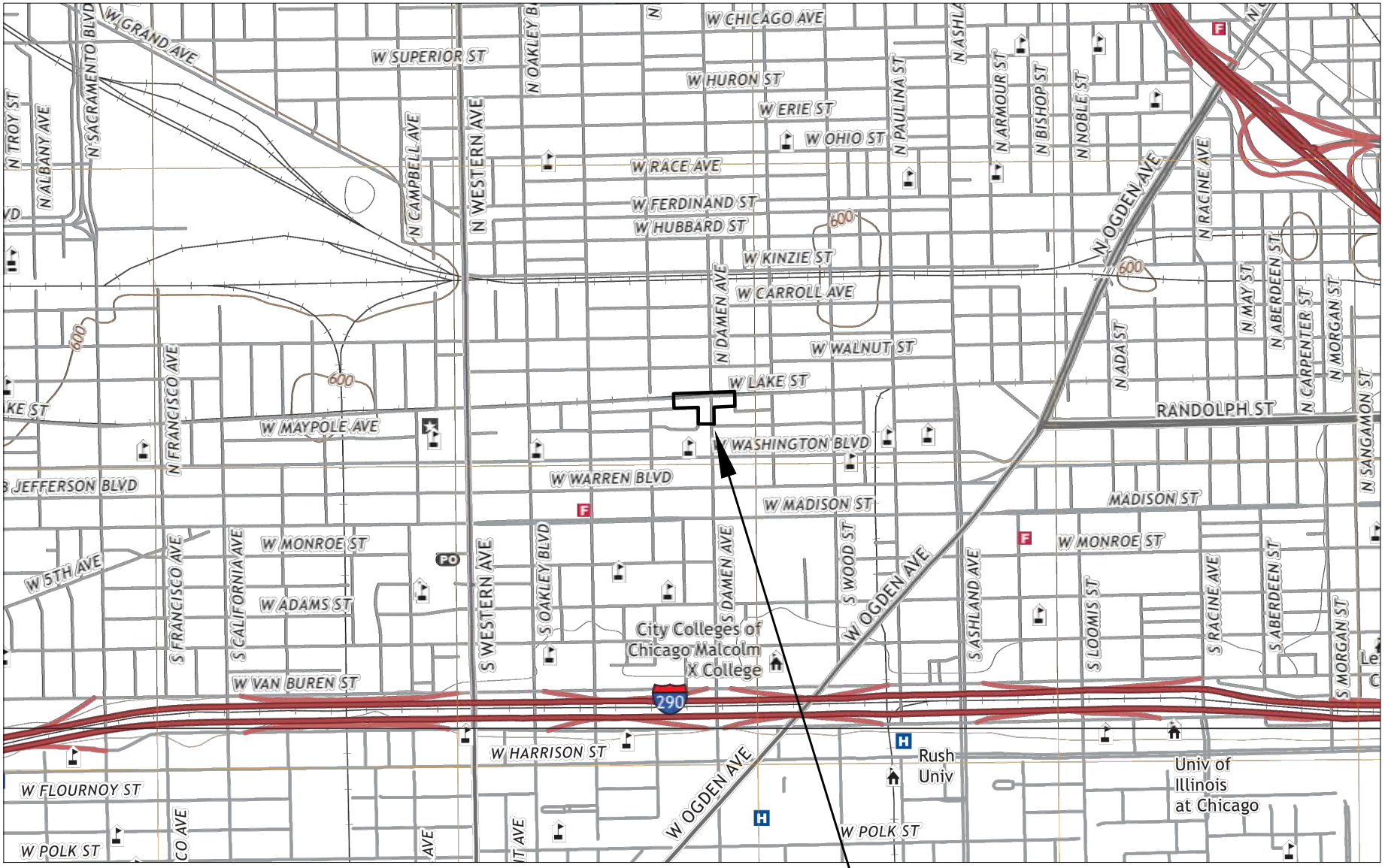
Erdmann, A. L., Adomaitis, D. J., Bannon-Nilles, P. L., Kientop, G. A., & Schmidt, D. R. (2012). A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Infrastructure Projects. Illinois State Geological Survey

2018 – Environmental Data Resources, Inc., EDR Radius Map with *Geocheck,* 2018

2018 – U.S. Fish and Wildlife Service National Wetlands Inventory Map: https://www.fws.gov/wetlands/data/mapper.html

EXHIBITS

EXHIBIT 1	**Site Location Map**
EXHIBIT 2	**PESA Site Map**
EXHIBIT 3	**RECs Map**

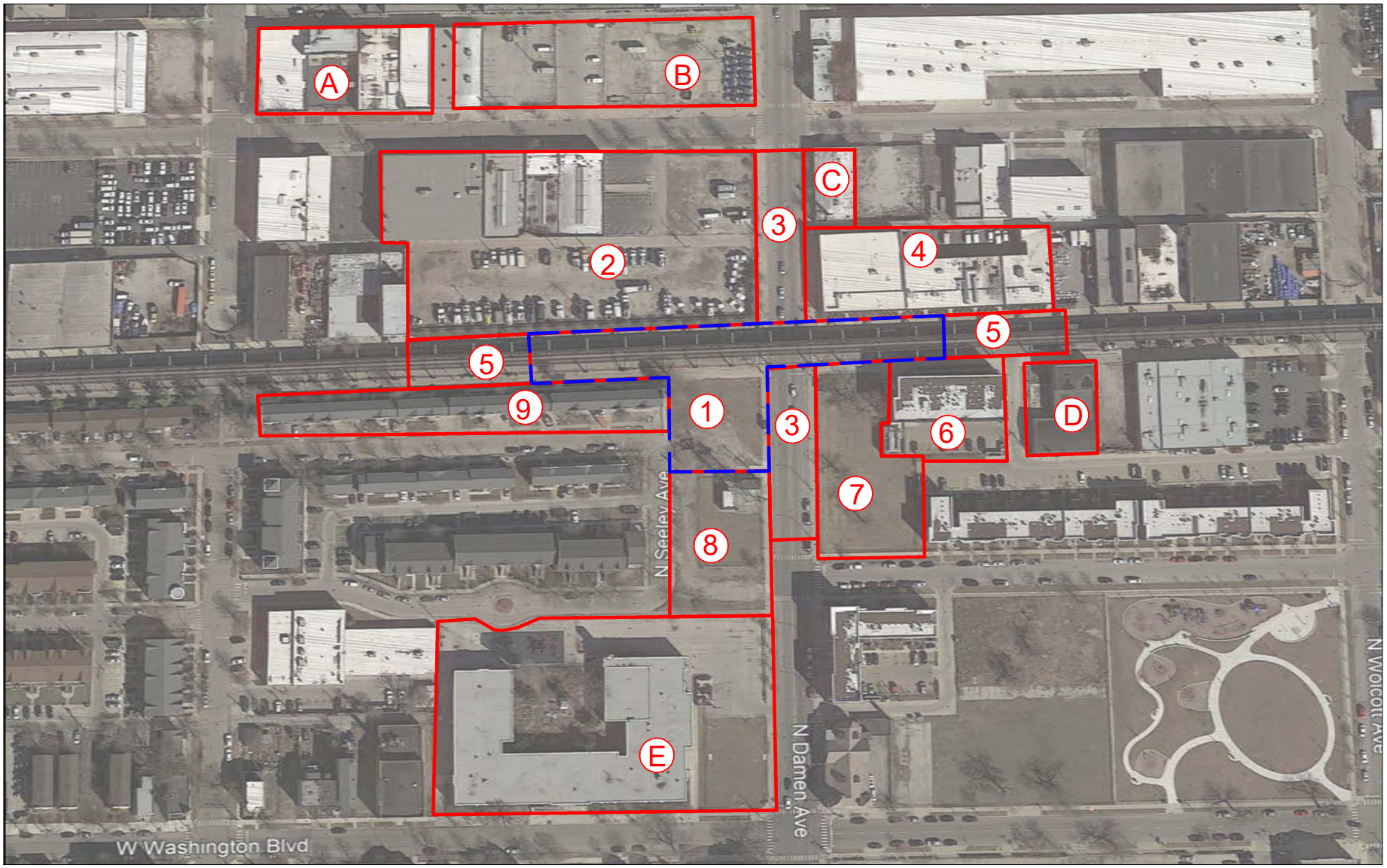


REFERENCES: 2018 CHICAGO LOOP, IL 7.5-MINUTE TOPOGRAPHIC MAP
2018 ENGLEWOOD, IL 7.5-MINUTE TOPOGRAPHIC MAP

GSG CONSULTANTS, INC.
ENGINEERS · SCIENTISTS · CONSTRUCTION MANAGERS
623 Cooper Court
Schaumburg, IL 60173
Tel: 630.994.2600

SCALE:	DRAWN BY:
NTS	EM
	CHECKED BY: TC
	DATE: 07/31/2018

EXHIBIT 1 - SITE LOCATION MAP
PROPOSED DAMEN GREEN LINE STATION
CHICAGO, IL

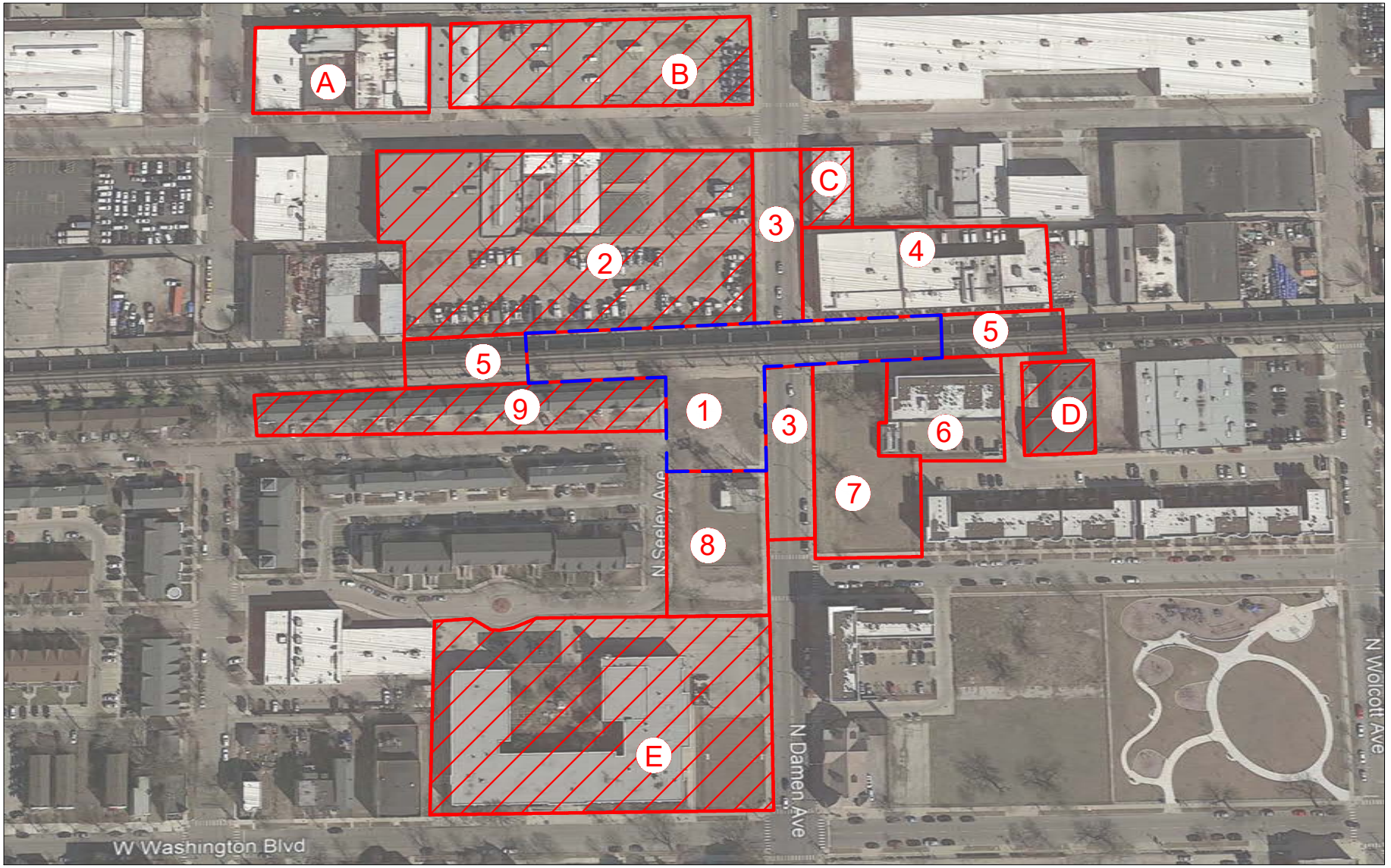


SITE ADJACENT PROPERTIES

GSG CONSULTANTS, INC.
ENGINEERS · SCIENTISTS · CONSTRUCTION MANAGERS
623 Cooper Court
Schaumburg, IL 60173
Tel: 630.994.2600

SCALE:	DRAWN BY:
NTS	EM
	CHECKED BY: TC
	DATE: 07/31/2018

EXHIBIT 2 - SITE LAYOUT MAP
PROPOSED DAMEN GREEN LINE STATION
CHICAGO, IL



SITE REC

GSG CONSULTANTS, INC.
ENGINEERS • SCIENTISTS • CONSTRUCTION MANAGERS
623 Cooper Court
Schaumburg, IL 60173
Tel: 630.994.2600

SCALE:	DRAWN BY:
NTS	EM
	CHECKED BY: TC
	DATE: 07/31/2018

EXHIBIT 3 - REC MAP
PROPOSED DAMEN GREEN LINE STATION
CHICAGO, IL

APPENDICES

APPENDIX A	**Historical Topographic Maps**
APPENDIX B	**Historical Aerial Photographs**
APPENDIX C	**Sanborn Fire Insurance Maps**
APPENDIX D	**Regulatory Database Information**
APPENDIX E	**Freedom of Information Act Information**
APPENDIX F	**Site Photographs**

APPENDIX A

Historical Topographic Maps

Damon Green Line

Damon Avenue & Lake Street

Chicago, IL 60612

Inquiry Number: 5350904.4

July 02, 2018

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

07/02/18

Site Name:

Damon Green Line
Damon Avenue & Lake Street
Chicago, IL 60612
EDR Inquiry # 5350904.4

Client Name:

GSG Environmental Group, LLC.
623 Cooper Court
SCHAUMBURG, IL 60173
Contact: Ted Cagney

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by GSG Environmental Group, LLC. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:

P.O.# NA
Project: CTA Green Line Damon Avenu

Coordinates:

Latitude:	41.884997 41° 53' 6" North
Longitude:	-87.676746 -87° 40' 36" West
UTM Zone:	Zone 16 North
UTM X Meters:	443852.56
UTM Y Meters:	4637229.09
Elevation:	597.00' above sea level

Maps Provided:

2012	1901
1997	1900
1993	1891
1978, 1980	1889
1972	
1963	
1953	
1929	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

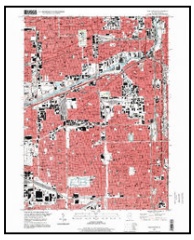
2012 Source Sheets

Englewood
2012
7.5-minute, 24000

Chicago Loop
2012
7.5-minute, 24000

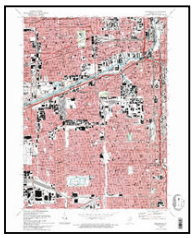
1997 Source Sheets

Chicago Loop
1997
7.5-minute, 24000
Aerial Photo Revised 1988

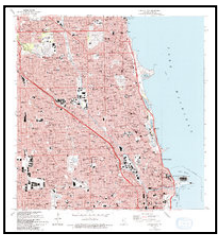


Englewood
1997
7.5-minute, 24000
Aerial Photo Revised 1997

1993 Source Sheets



Englewood
1993
7.5-minute, 24000
Aerial Photo Revised 1988



Chicago Loop
1993
7.5-minute, 24000
Aerial Photo Revised 1988

1978, 1980 Source Sheets

Chicago Loop
1978
7.5-minute, 24000
Aerial Photo Revised 1972

Englewood
1980
7.5-minute, 24000
Aerial Photo Revised 1978

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1972 Source Sheets

Englewood
1972
7.5-minute, 24000
Aerial Photo Revised 1972

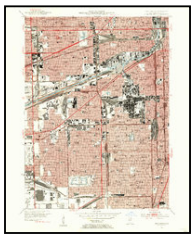
Chicago Loop
1972
7.5-minute, 24000
Aerial Photo Revised 1972

1963 Source Sheets

Chicago Loop
1963
7.5-minute, 24000
Aerial Photo Revised 1962

Englewood
1963
7.5-minute, 24000
Aerial Photo Revised 1963

1953 Source Sheets



Englewood
1953
7.5-minute, 24000

Chicago Loop
1953
7.5-minute, 24000

1929 Source Sheets

Englewood
1929
7.5-minute, 24000

Chicago Loop
1929
7.5-minute, 24000

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1901 Source Sheets

Chicago
1901
15-minute, 62500

1900 Source Sheets

Chicago
1900
15-minute, 62500

1891 Source Sheets

Chicago
1891
15-minute, 62500

1889 Source Sheets

Chicago
1889
15-minute, 62500

Historical Topo Map

2012

This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

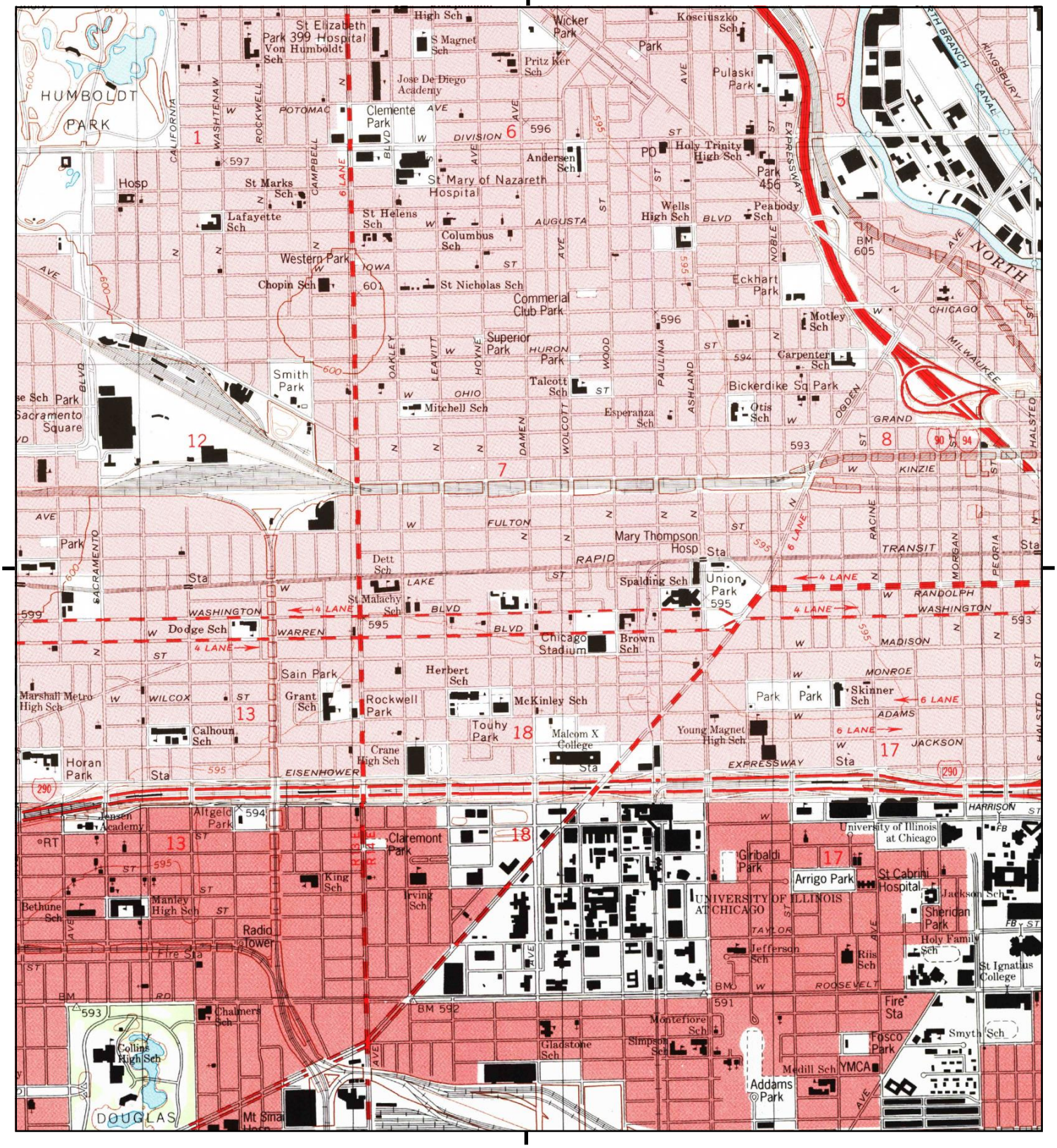
TP, Chicago Loop, 2012, 7.5-minute
S, Englewood, 2012, 7.5-minute

SITE NAME: Damon Green Line
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

N

Historical Topo Map

1997



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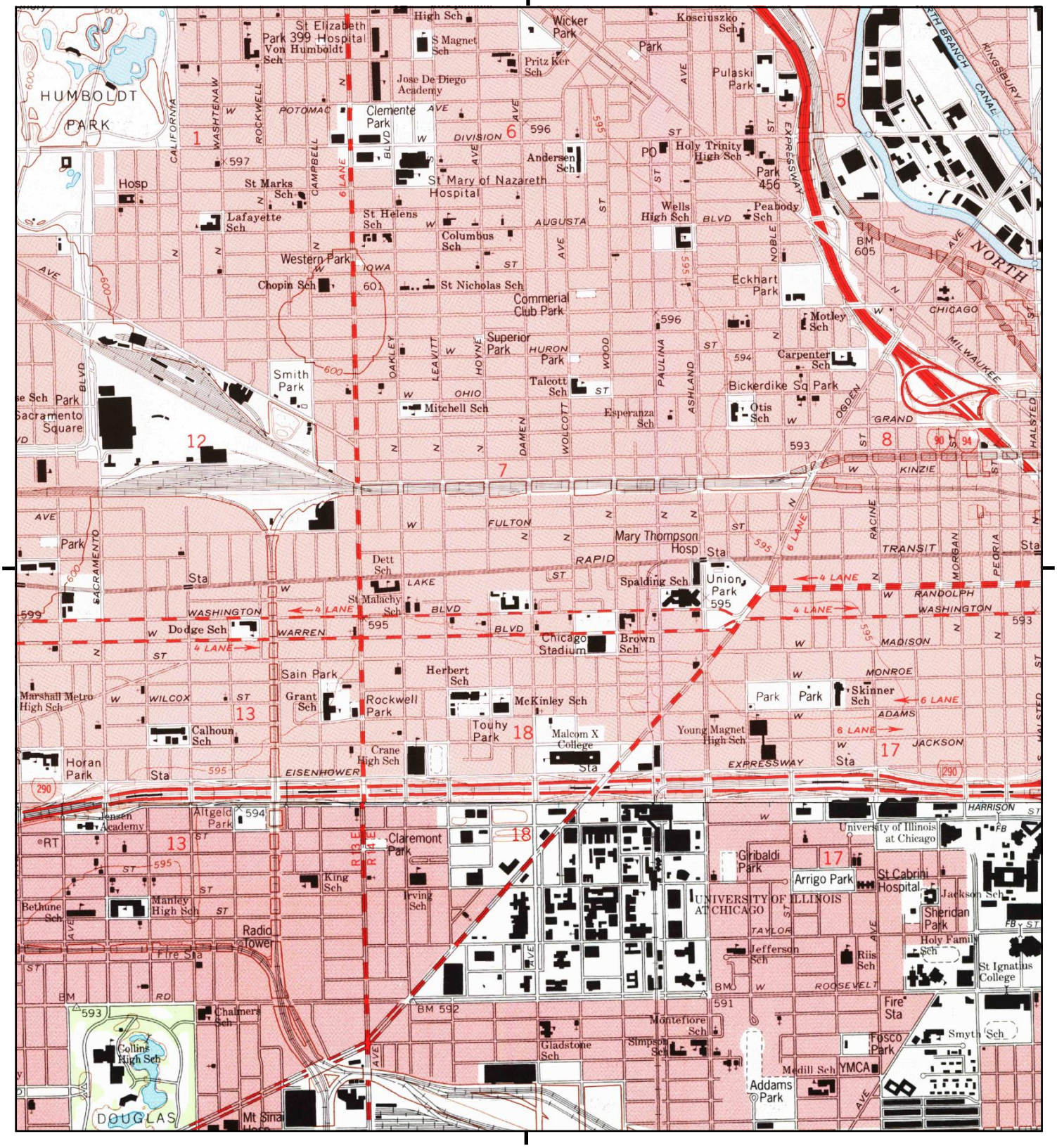
W E
SW S SE

TP, Chicago Loop, 1997, 7.5-minute
S, Englewood, 1997, 7.5-minute

SITE NAME: Damon Green Line
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

N



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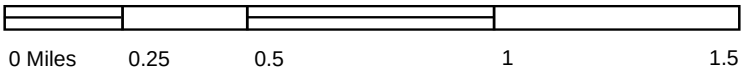
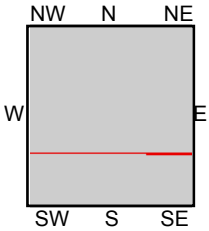


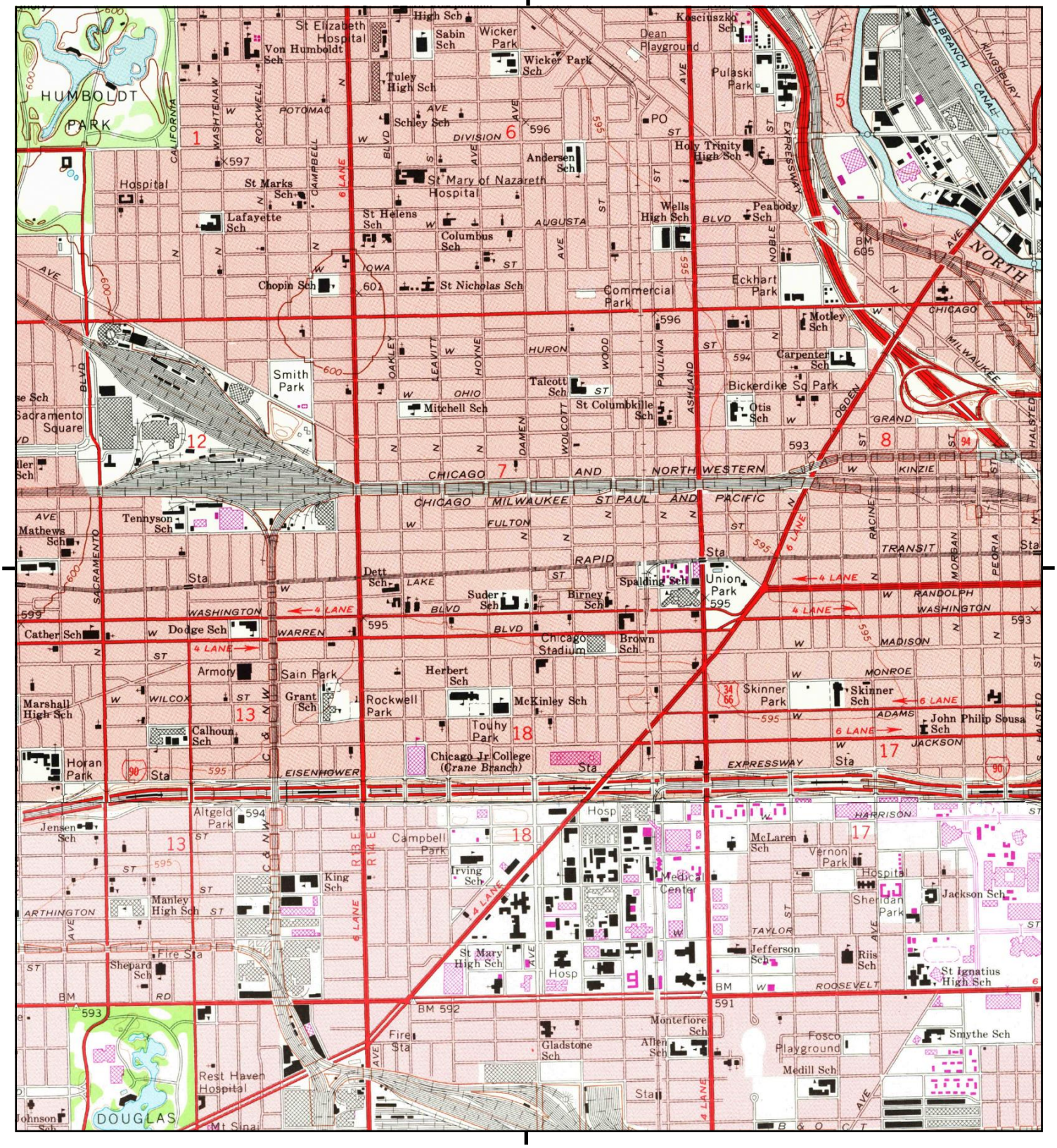


TP, Chicago Loop, 1993, 7.5-minute
S, Englewood, 1993, 7.5-minute

SITE NAME: Damon Green Line
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

Historical Topo Map

1978, 1980



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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

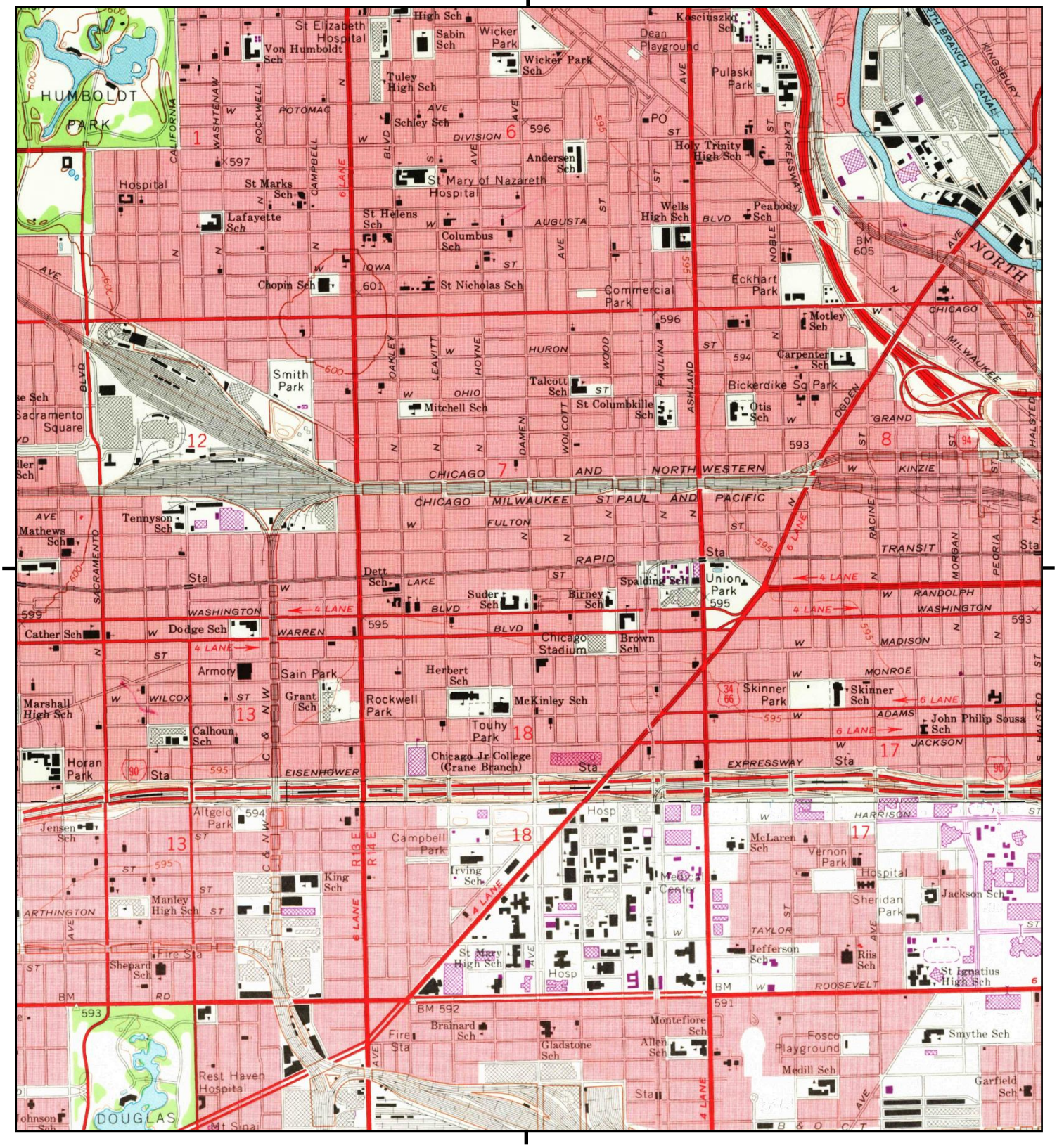
TP, Chicago Loop, 1978, 7.5-minute
S, Englewood, 1980, 7.5-minute

SITE NAME: Damon Green Line
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

N

Historical Topo Map

1972



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W E
SW S SE

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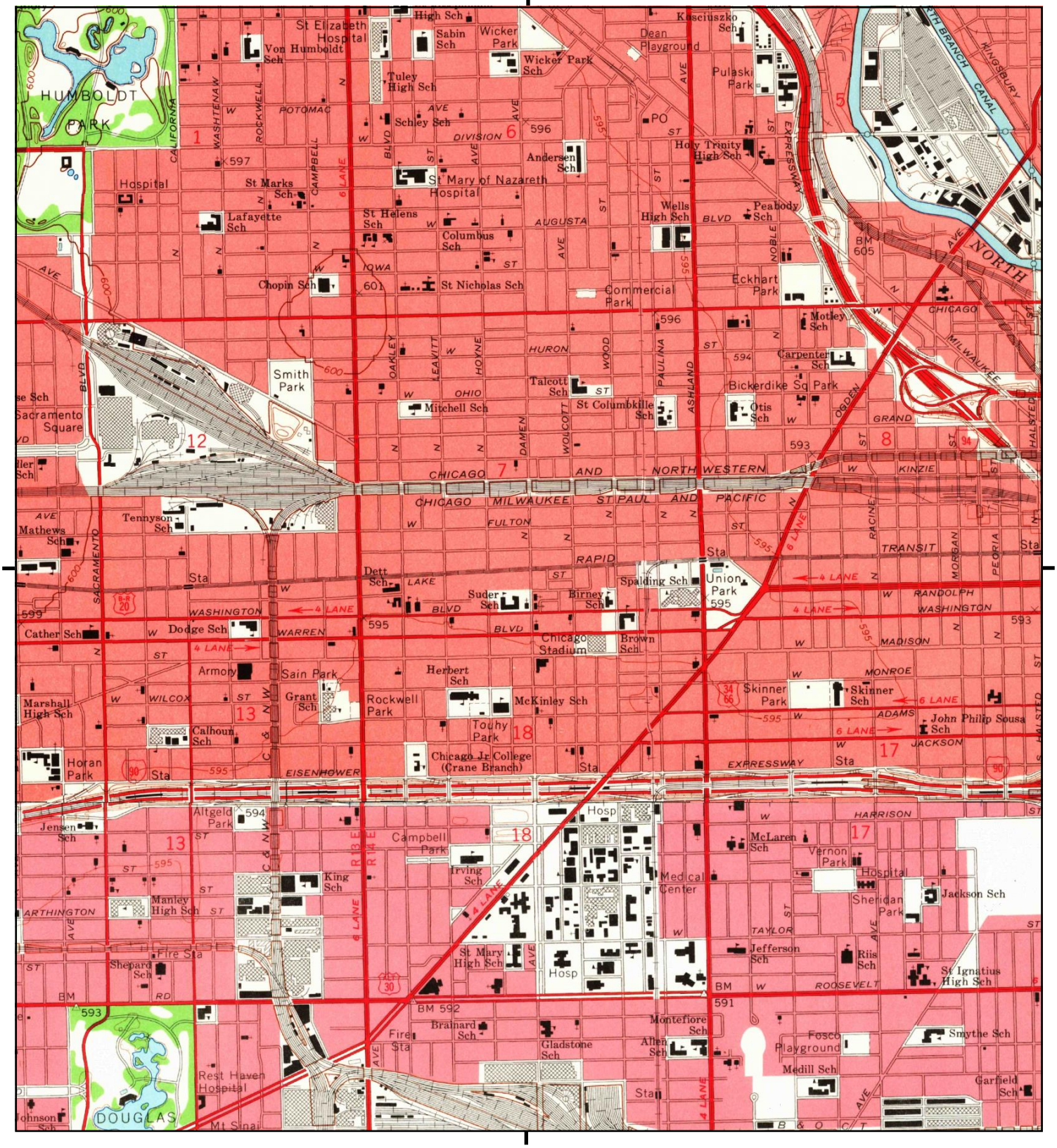
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

N



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NW N NE
W E
SW S SE

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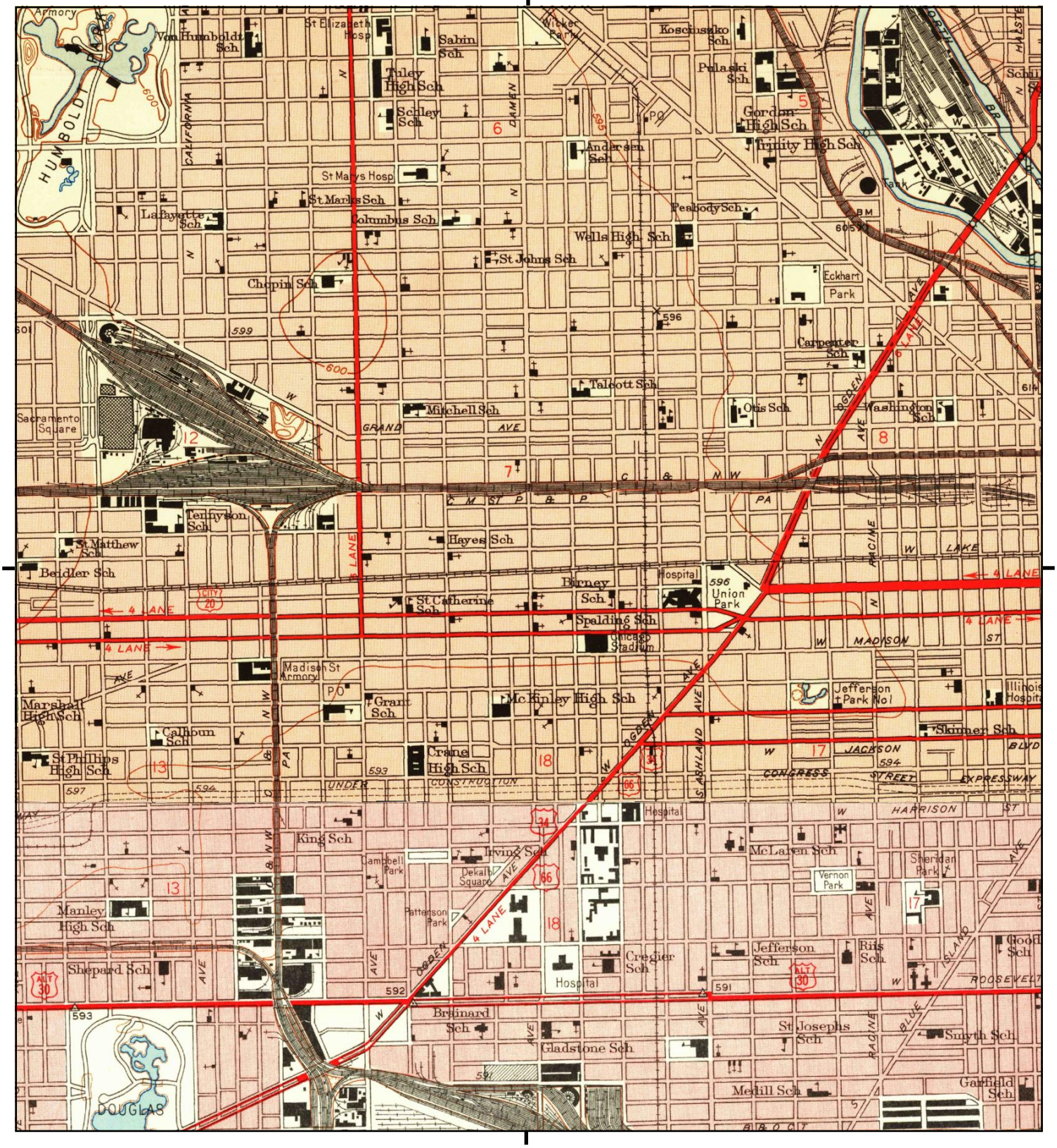
S, Englewood, 1963, 7.5-minute

SITE NAME: Damon Green Line
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

N



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NW N NE
W E
SW S SE

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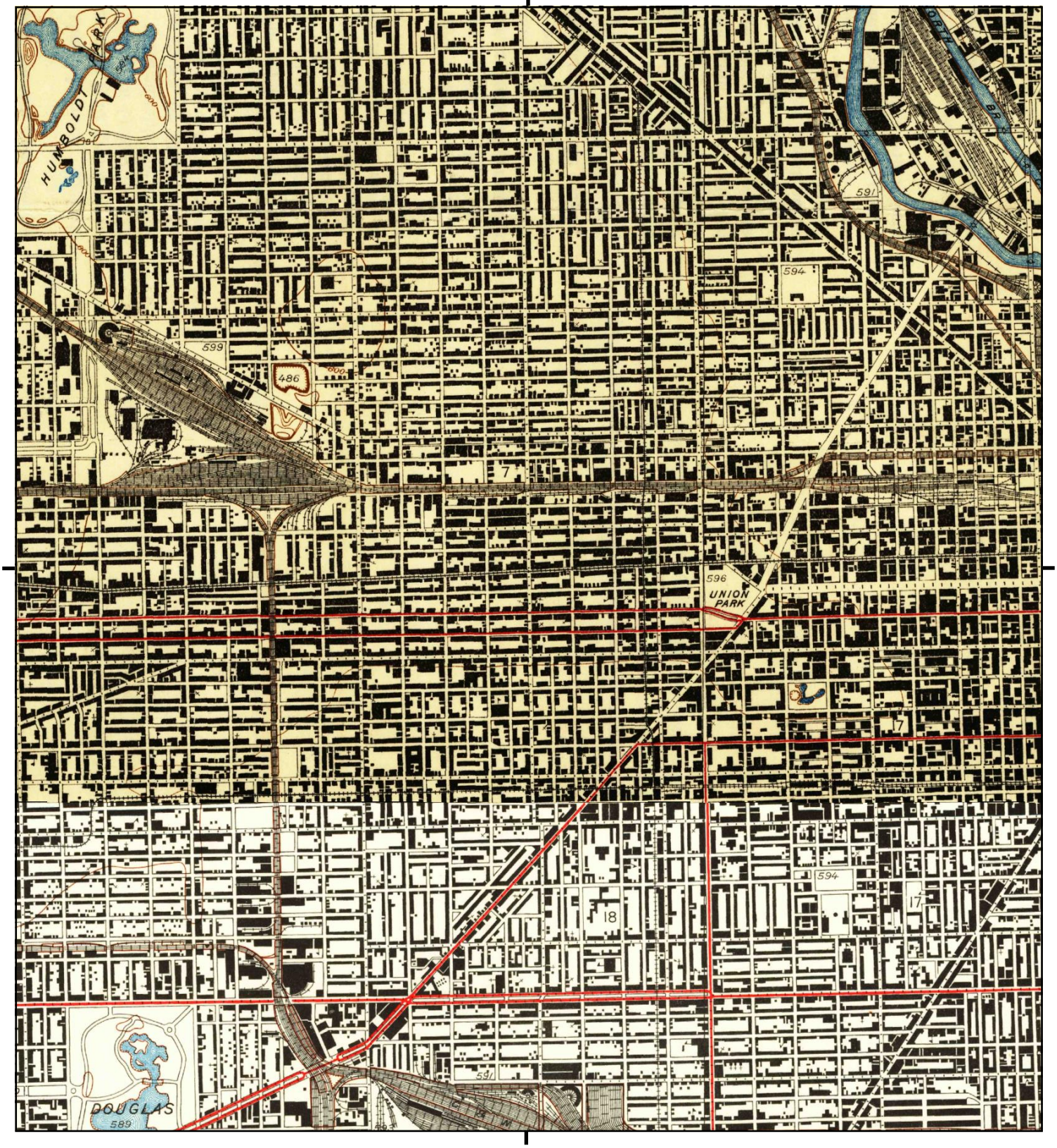
S, Englewood, 1953, 7.5-minute

SITE NAME: Damon Green Line
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

N

Historical Topo Map

1929



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W E
SW S SE

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S, Englewood, 1929, 7.5-minute

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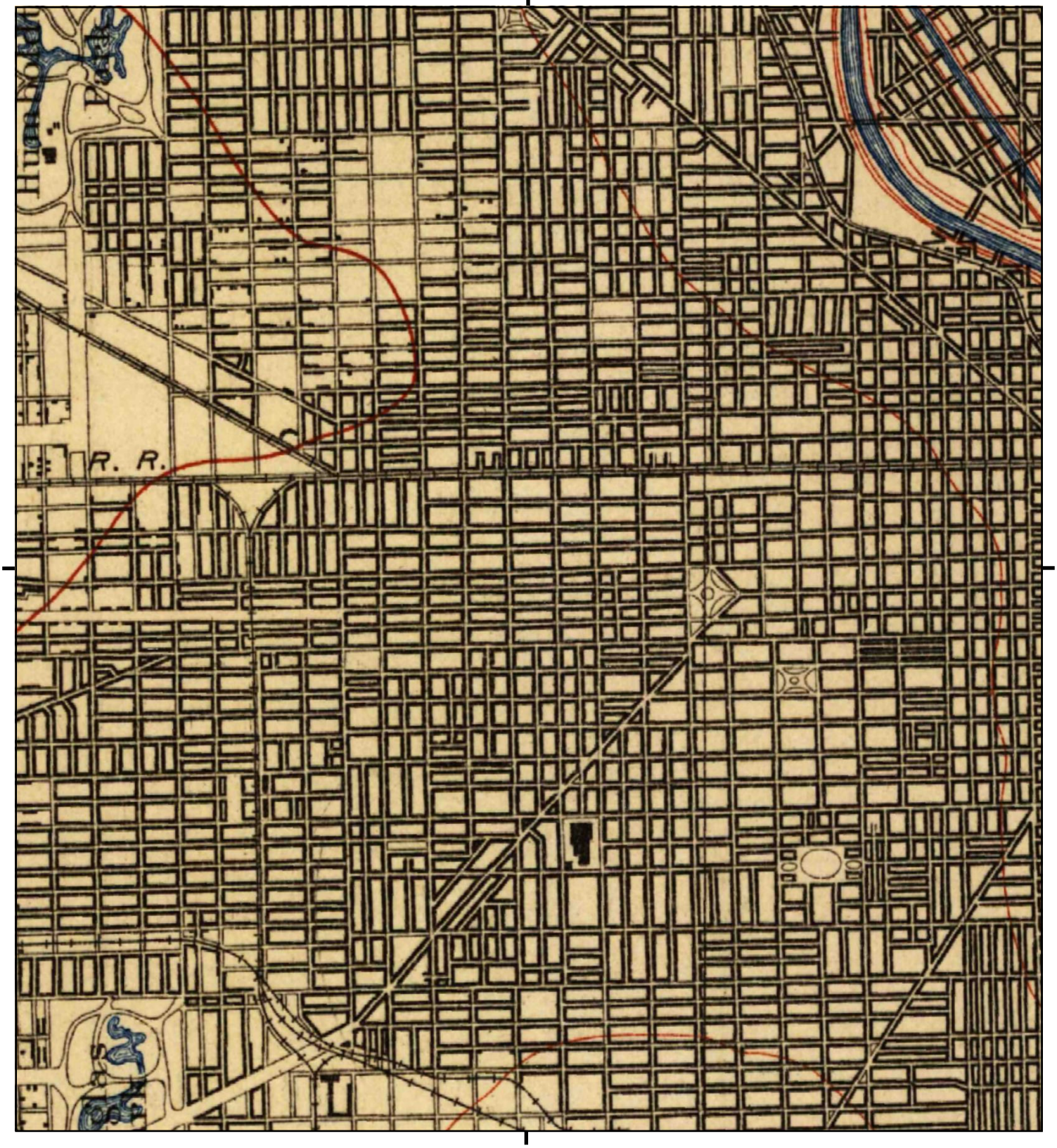
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

N



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W E
SW S SE

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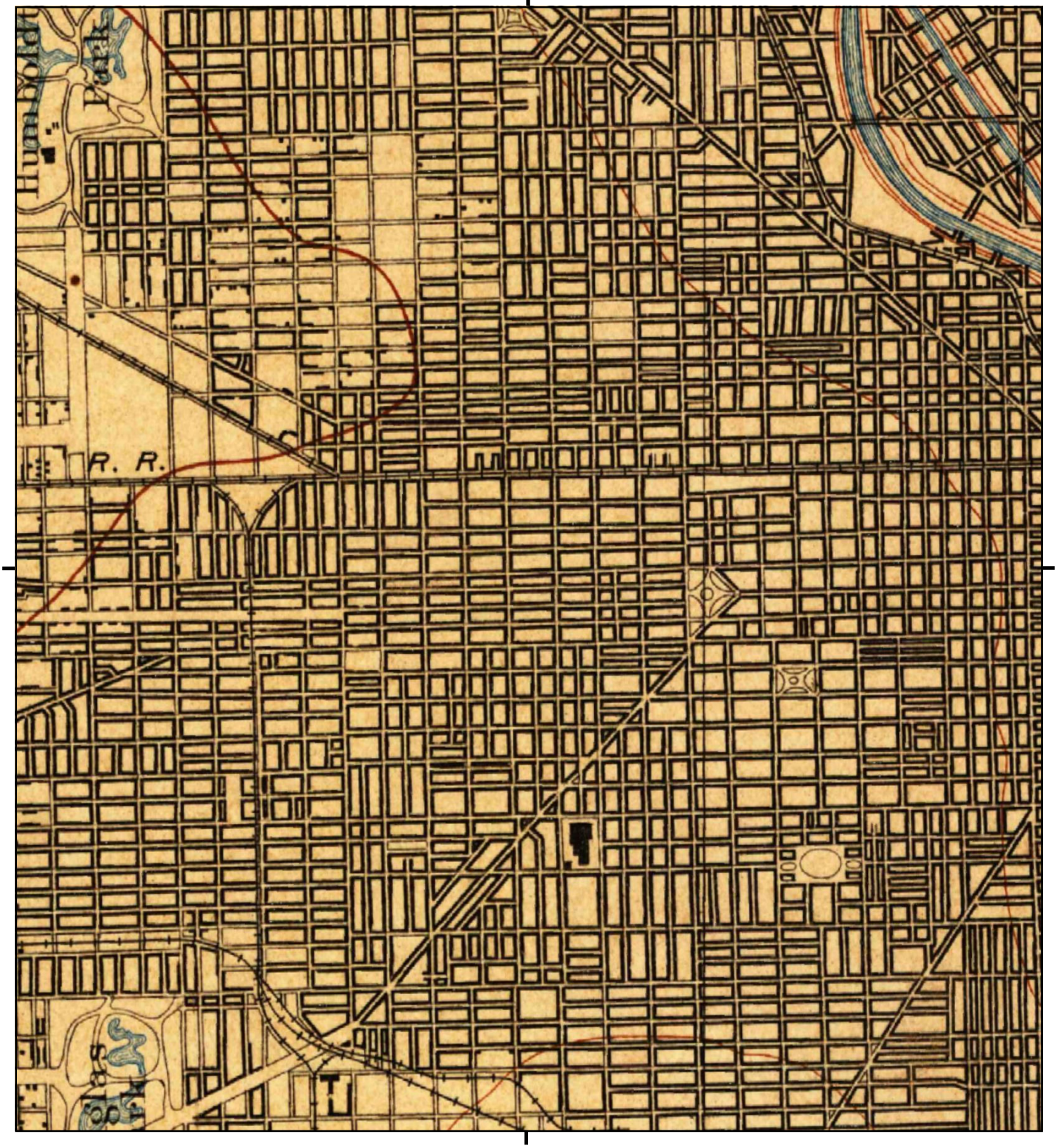
SITE NAME: Damon Green Line
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

N



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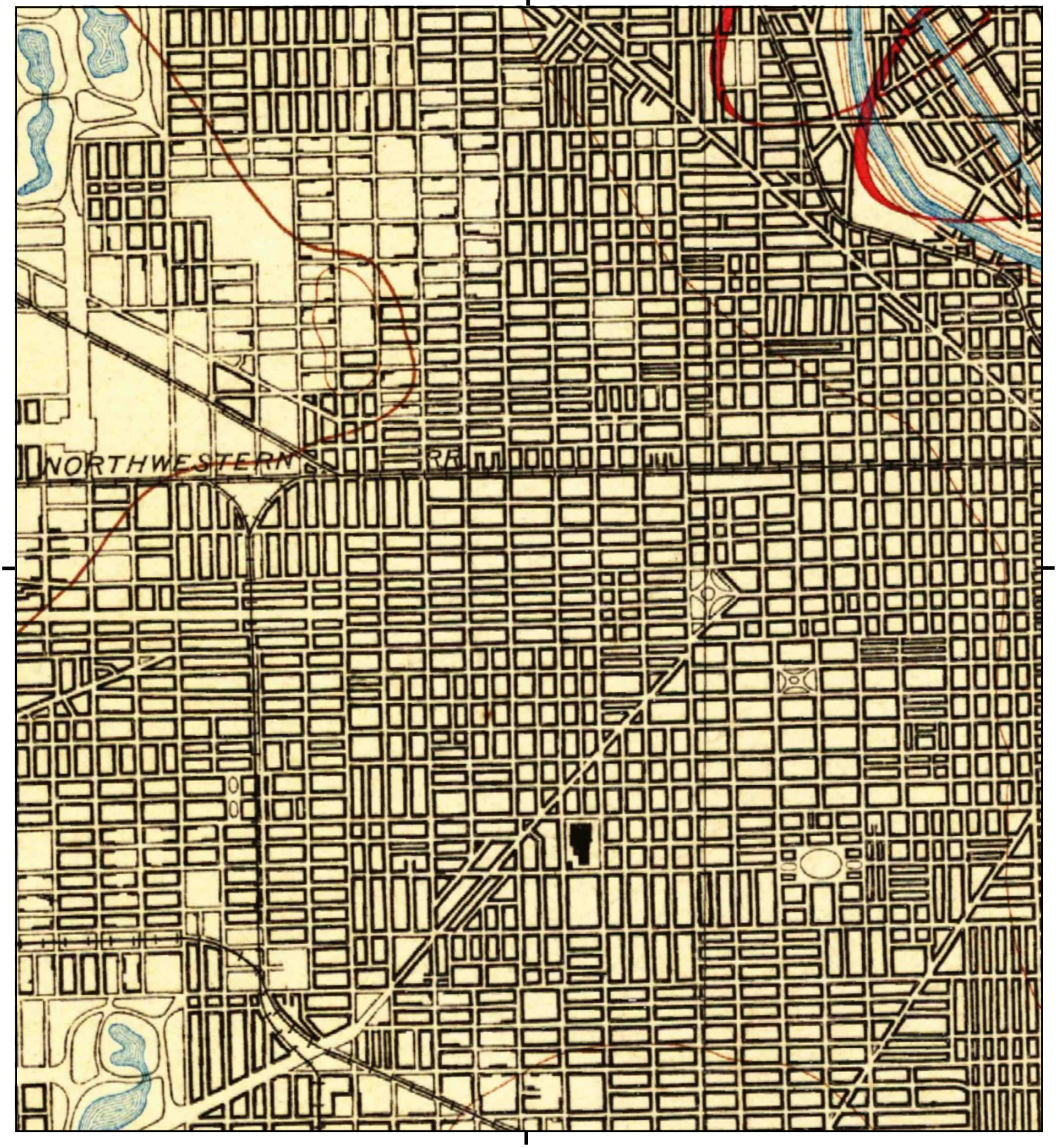
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Chicago, 1900, 15-minute

SITE NAME: Damon Green Line
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

N



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0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

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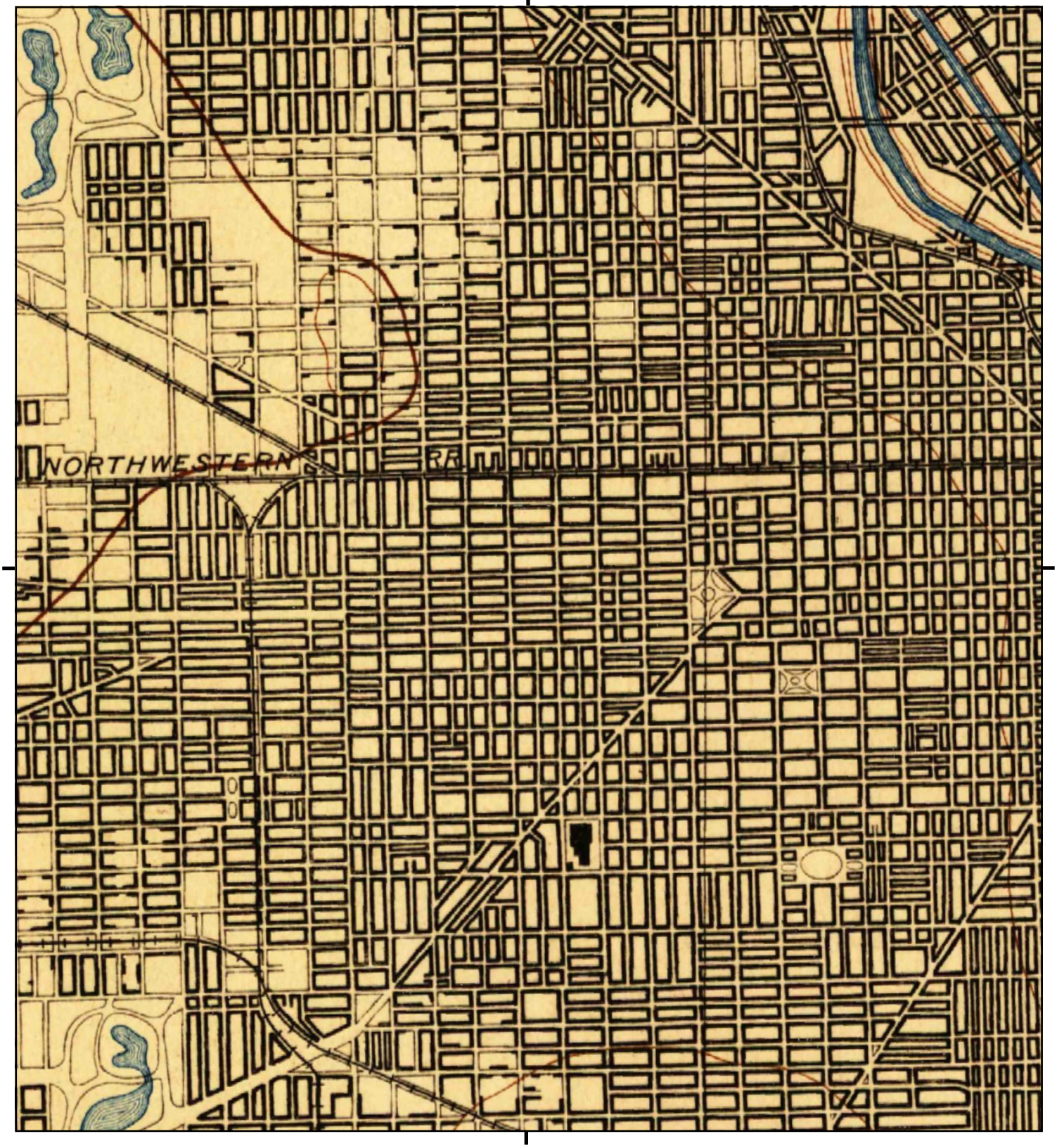
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

N



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Chicago, 1889, 15-minute

SITE NAME: Damon Green Line
ADDRESS: Damon Avenue & Lake Street
Chicago, IL 60612
CLIENT: GSG Environmental Group, LLC.

N

APPENDIX B

Historical Aerial Photographs

Damon Green Line

Damon Avenue & Lake Street

Chicago, IL 60612

Inquiry Number: 5350904.8

July 03, 2018

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

07/03/18

Site Name:

Damon Green Line
Damon Avenue & Lake Street
Chicago, IL 60612
EDR Inquiry # 5350904.8

Client Name:

GSG Environmental Group, LLC.
623 Cooper Court
SCHAUMBURG, IL 60173
Contact: Ted Cagney

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2017	1"=500'	Flight Year: 2017	USDA/NAIP
2014	1"=500'	Flight Year: 2014	USDA/NAIP
2011	1"=500'	Flight Year: 2011	USDA/NAIP
2007	1"=500'	Flight Year: 2007	USDA/NAIP
1999	1"=500'	Acquisition Date: March 27, 1999	USGS/DOQQ
1994	1"=500'	Flight Date: March 25, 1994	USGS
1988	1"=500'	Flight Date: April 12, 1988	USDA
1984	1"=500'	Flight Date: April 01, 1984	USGS
1978	1"=500'	Flight Date: October 30, 1978	USGS
1972	1"=500'	Flight Date: October 26, 1972	USGS
1962	1"=500'	Flight Date: April 20, 1962	USGS
1952	1"=500'	Flight Date: March 29, 1952	USGS
1938	1"=500'	Flight Date: November 29, 1938	ILGS

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YEAR: 2017

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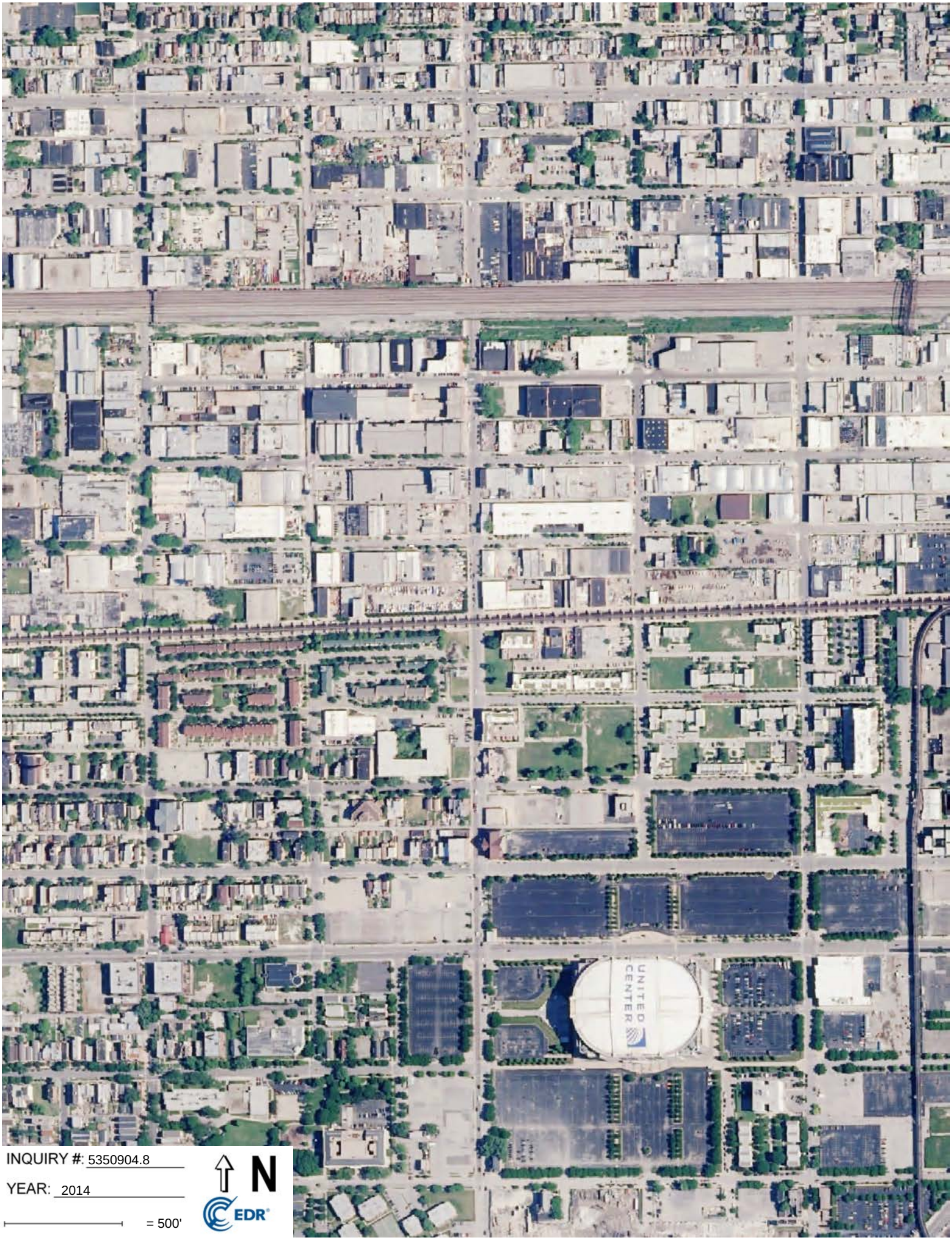
EDR



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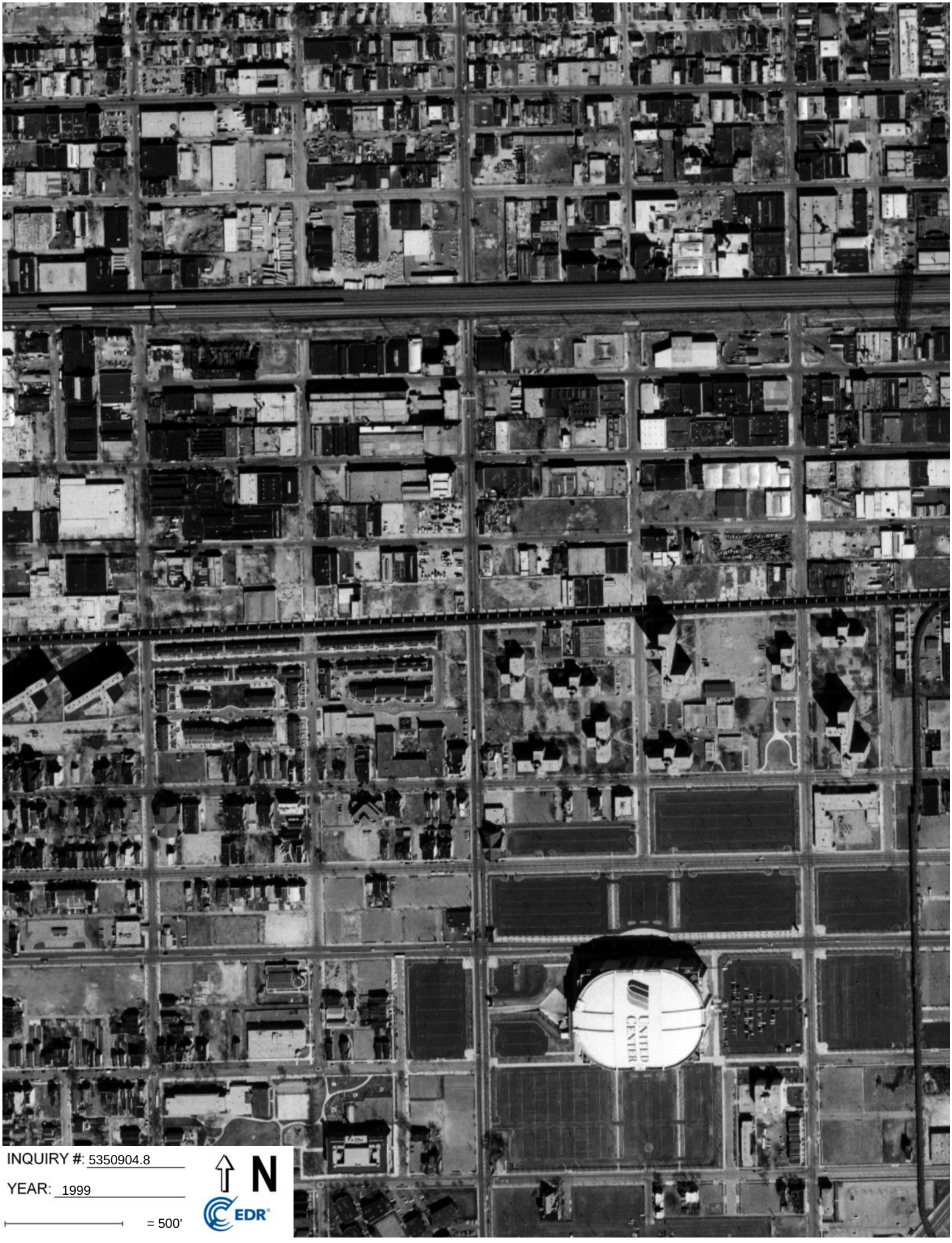

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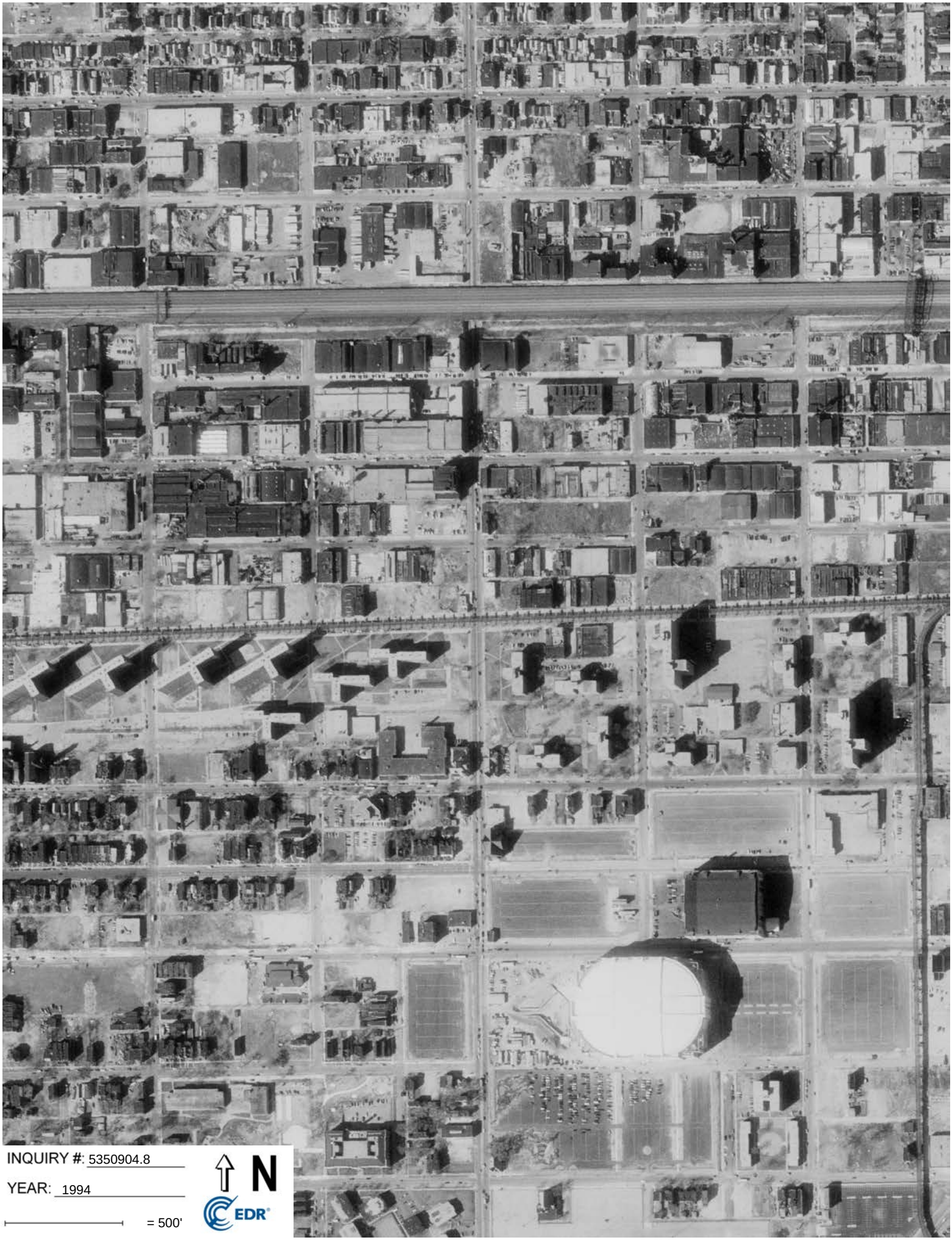

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EDR

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YEAR: 1988

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EDR

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YEAR: 1984
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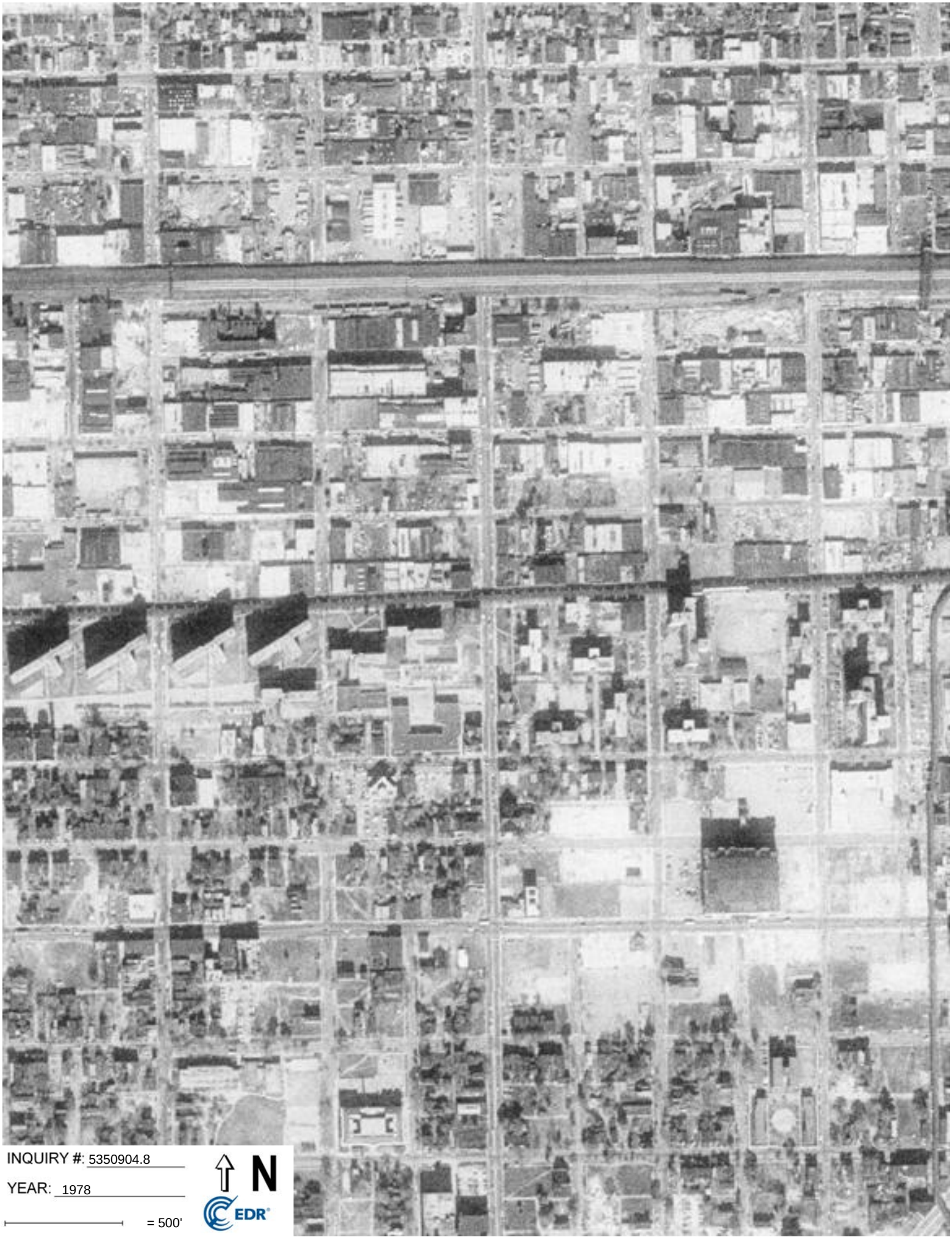

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YEAR: 1978

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EDR

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EDR

INQUIRY #: 5350904.8

YEAR: 1962

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N

EDR

INQUIRY #: 5350904.8
YEAR: 1952
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EDR

INQUIRY #: 5350904.8
YEAR: 1938
= 500'
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EDR

APPENDIX C

Sanborn Fire Insurance Maps

Damon Green Line

Damon Avenue & Lake Street

Chicago, IL 60612

Inquiry Number: 5350904.3

July 03, 2018

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

07/03/18

Site Name:

Damon Green Line
Damon Avenue & Lake Street
Chicago, IL 60612
EDR Inquiry # 5350904.3

Client Name:

GSG Environmental Group, LLC.
623 Cooper Court
SCHAUMBURG, IL 60173
Contact: Ted Cagney

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by GSG Environmental Group, LLC. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # C585-4E9E-B53A

PO # NA

Project CTA Green Line Damon Avenue

Maps Provided:

2004
2002
1993
1991
1988
1975
1950
1916

Sanborn® Library search results

Certification #: C585-4E9E-B53A

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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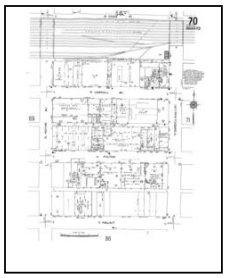
Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

2004 Source Sheets



Volume 6, Sheet 70
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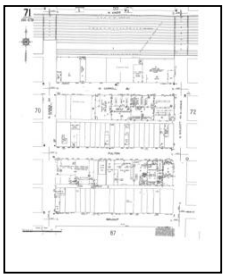

Volume 6, Sheet 71
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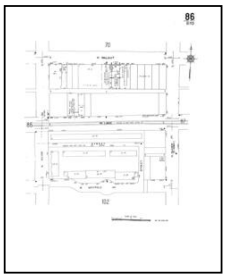

Volume 6, Sheet 86
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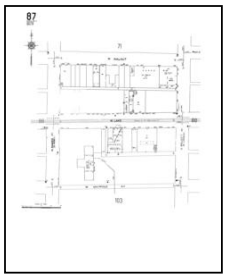
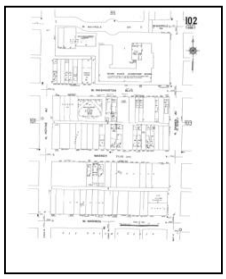


Volume 6, Sheet 87
2004



Volume 6, Sheet 102
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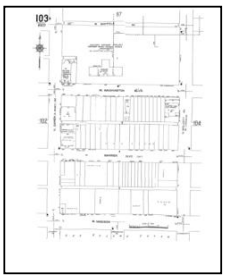

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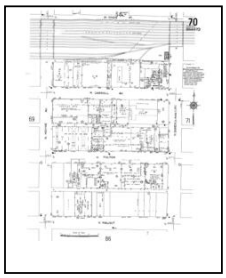
2004

2002 Source Sheets



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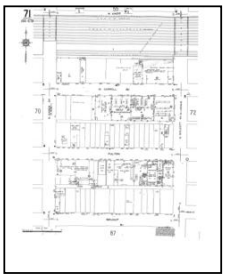

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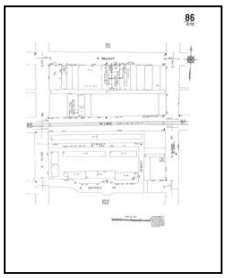

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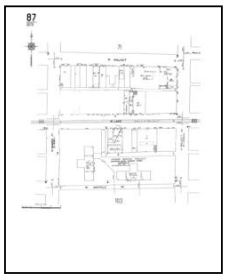

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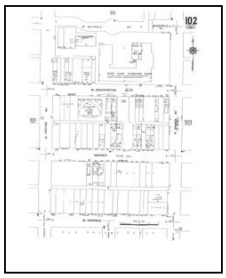

Volume 6, Sheet 102
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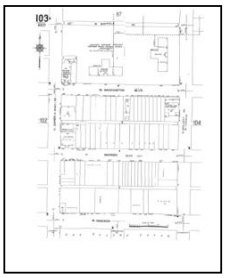

Volume 6, Sheet 103
2002

Sanborn Sheet Key

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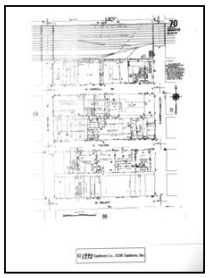
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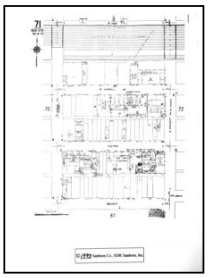
Volume 6, Sheet 71
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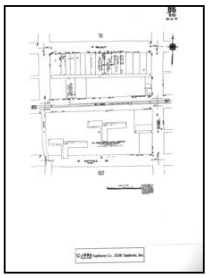
Volume 6, Sheet 86
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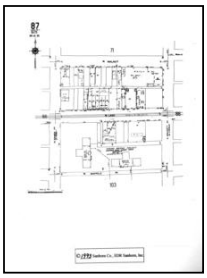
Volume 6, Sheet 87
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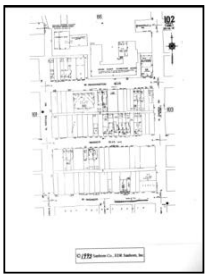
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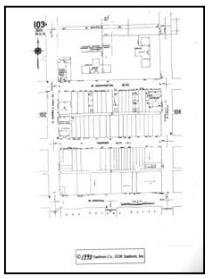
Volume 6, Sheet 103
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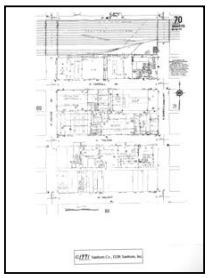
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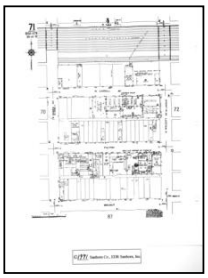
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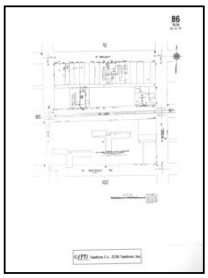
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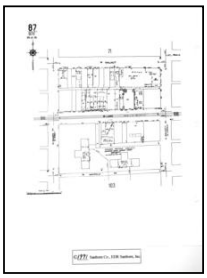
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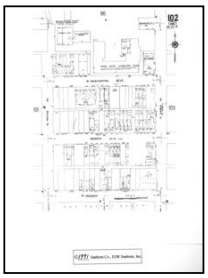
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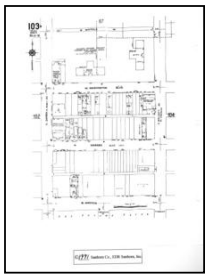
Volume 6, Sheet 103
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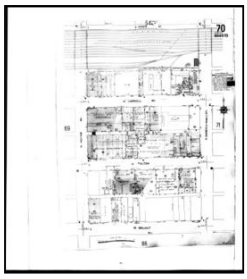

Volume 6, Sheet 70
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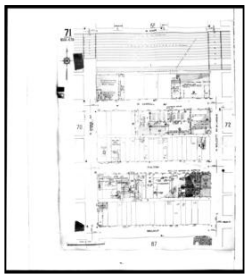
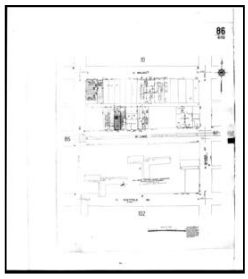


Volume 6, Sheet 71
1988



Volume 6, Sheet 86
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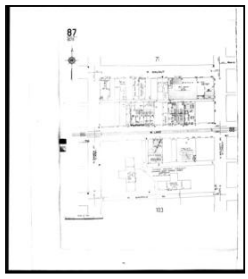
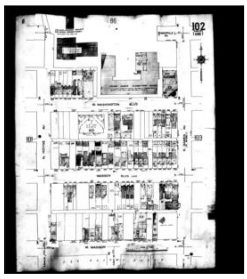


Volume 6, Sheet 87
1988

Volume 6, Sheet 102
1988

Volume 6, Sheet 103
1988

1975 Source Sheets



Volume 6, Sheet 102
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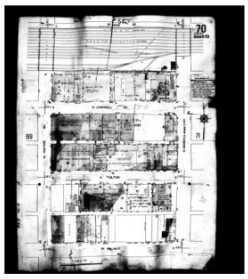

Volume 6, Sheet 70
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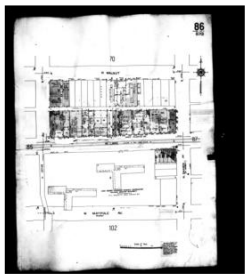

Volume 6, Sheet 86
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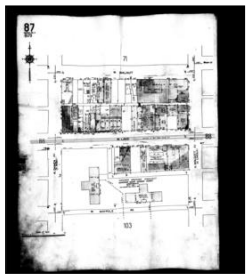

Volume 6, Sheet 87
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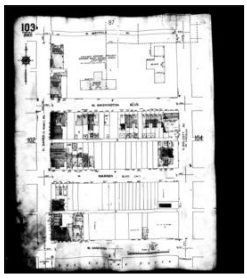

Volume 6, Sheet 103
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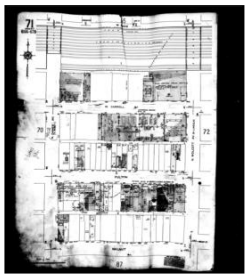

Volume 6, Sheet 71
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Sanborn Sheet Key

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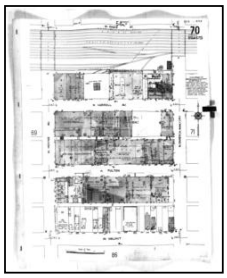
1950 Source Sheets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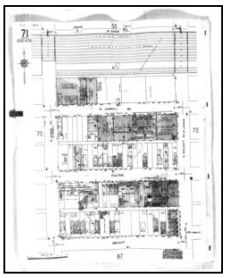
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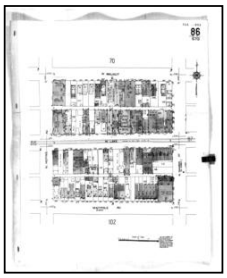
Volume 6, Sheet 86
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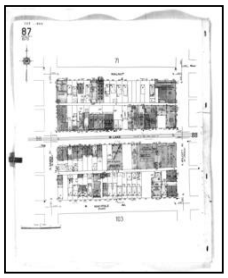
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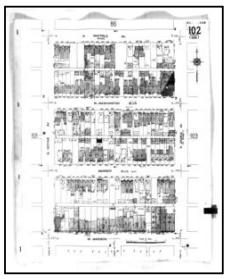
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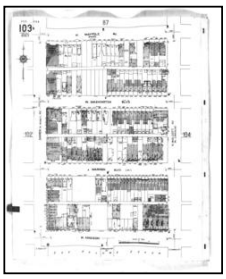
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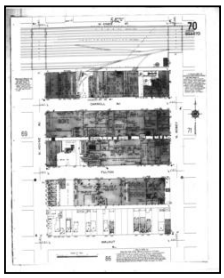
1916 Source Sheets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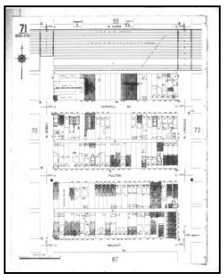
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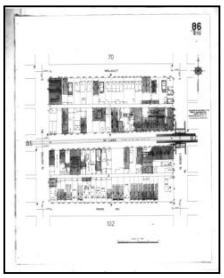
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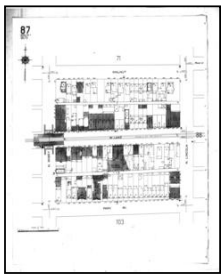
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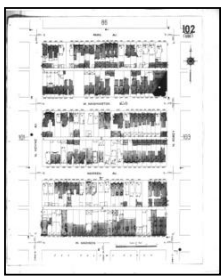
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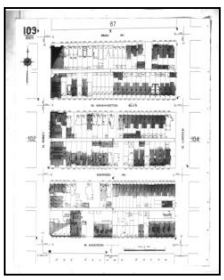
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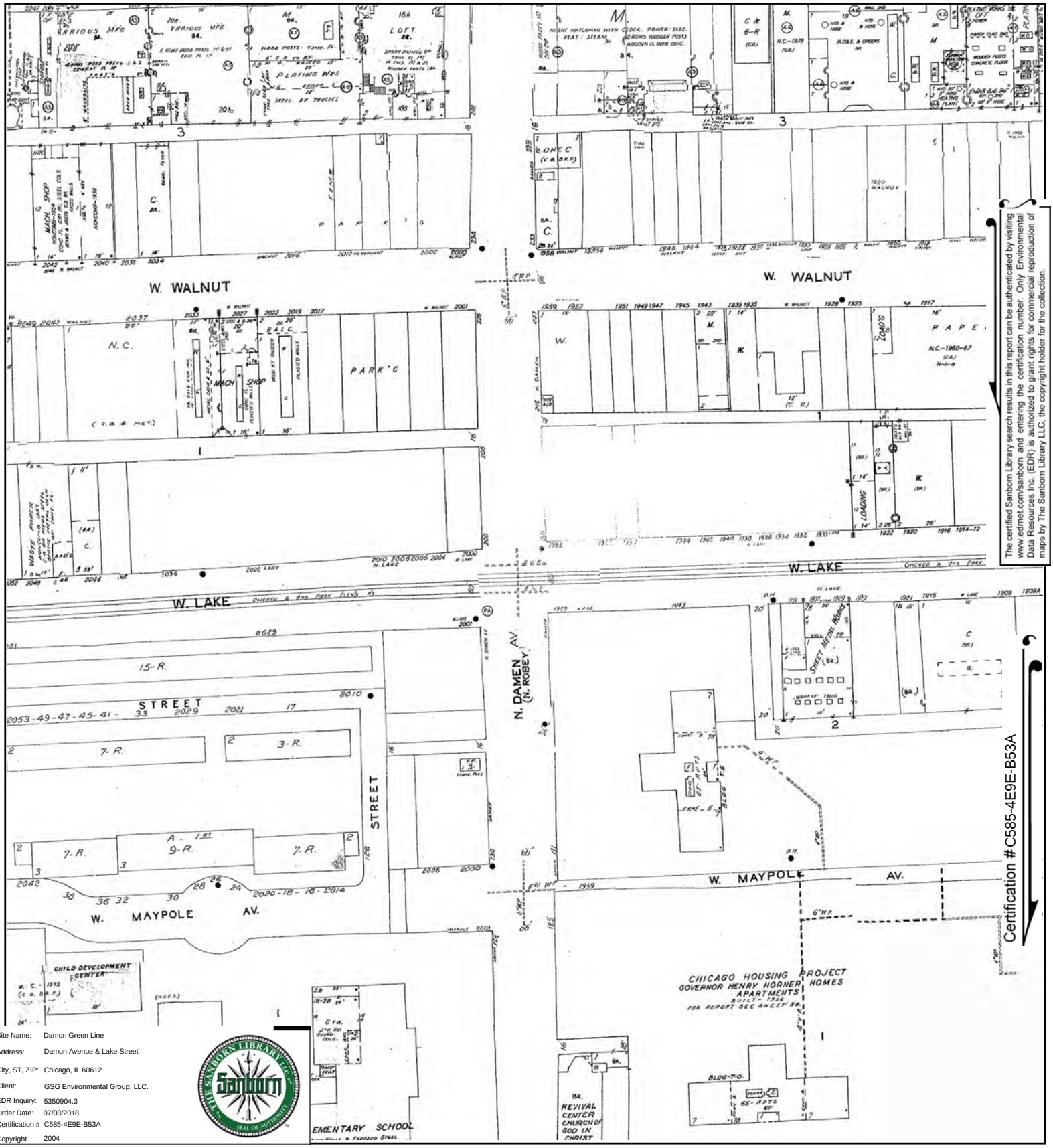

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Site Name:	Damon Green Line
Address:	Damon Avenue & Lake Street
City, ST, ZIP:	Chicago, IL 60612
Client:	GSG Environmental Group, LLC.
EDR Inquiry:	5350904.3
Order Date:	07/03/2018
Certification #	C585-4E9E-B53A
Copyright	2004

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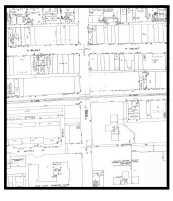

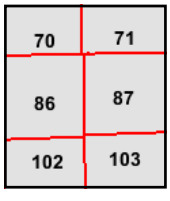

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Volume 6, Sheet 87
Volume 6, Sheet 86
Volume 6, Sheet 71
Volume 6, Sheet 70

0 Feet 150 300 600

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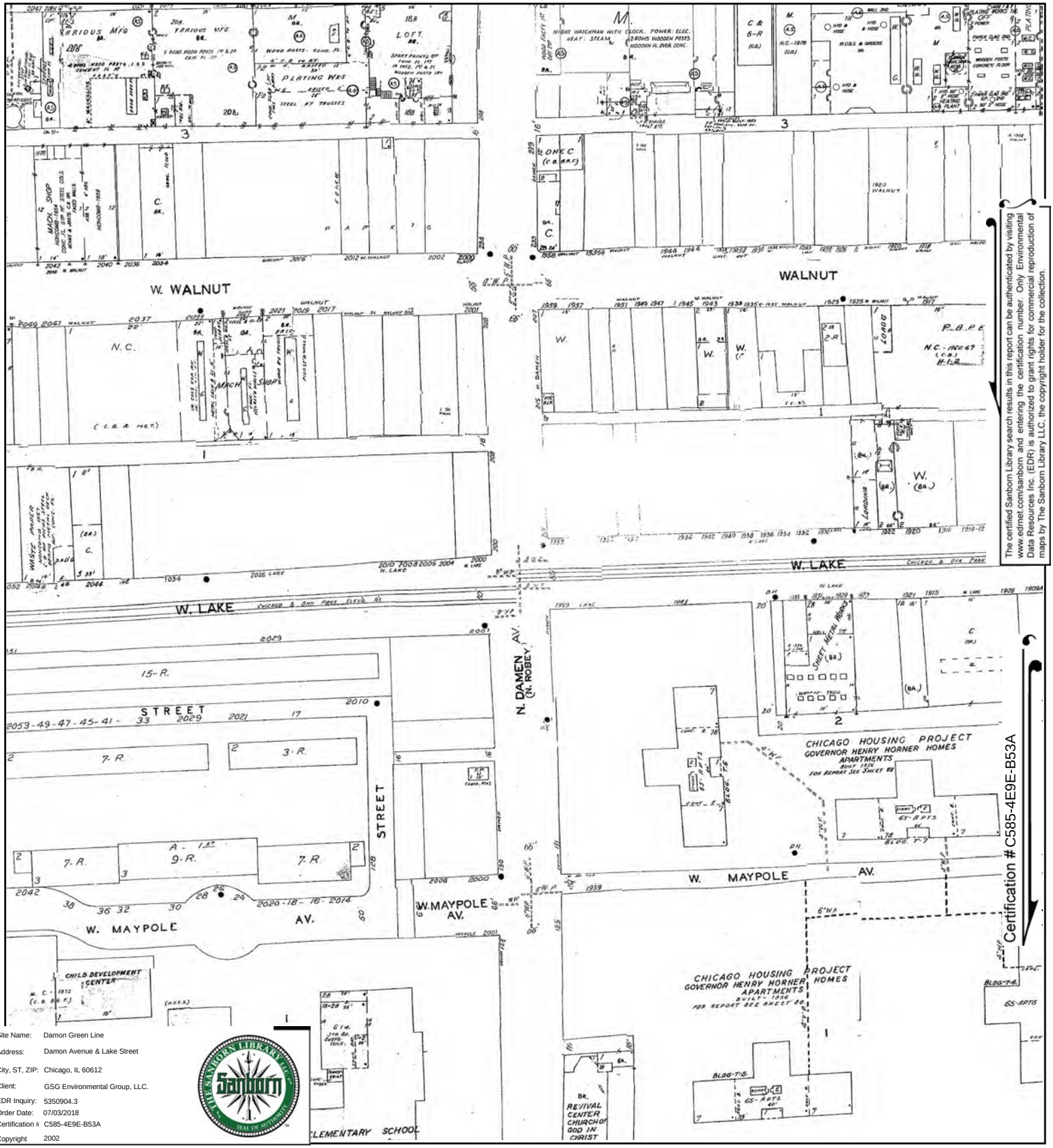

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Copyright	2002

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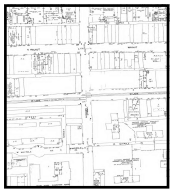

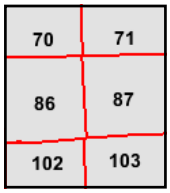

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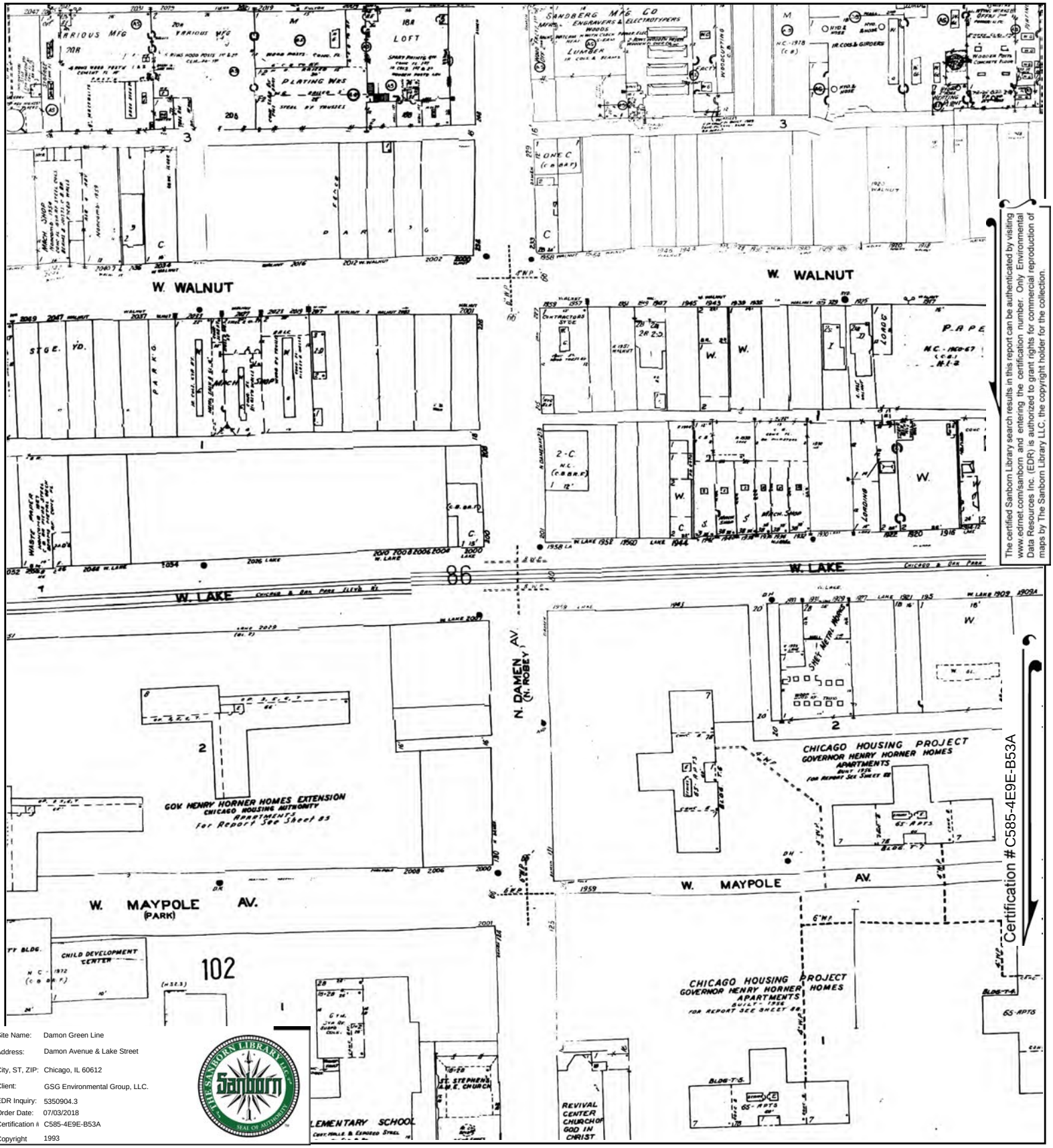

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Certification #:	C585-4E9E-B53A
Copyright	1993

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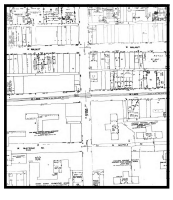

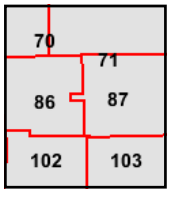

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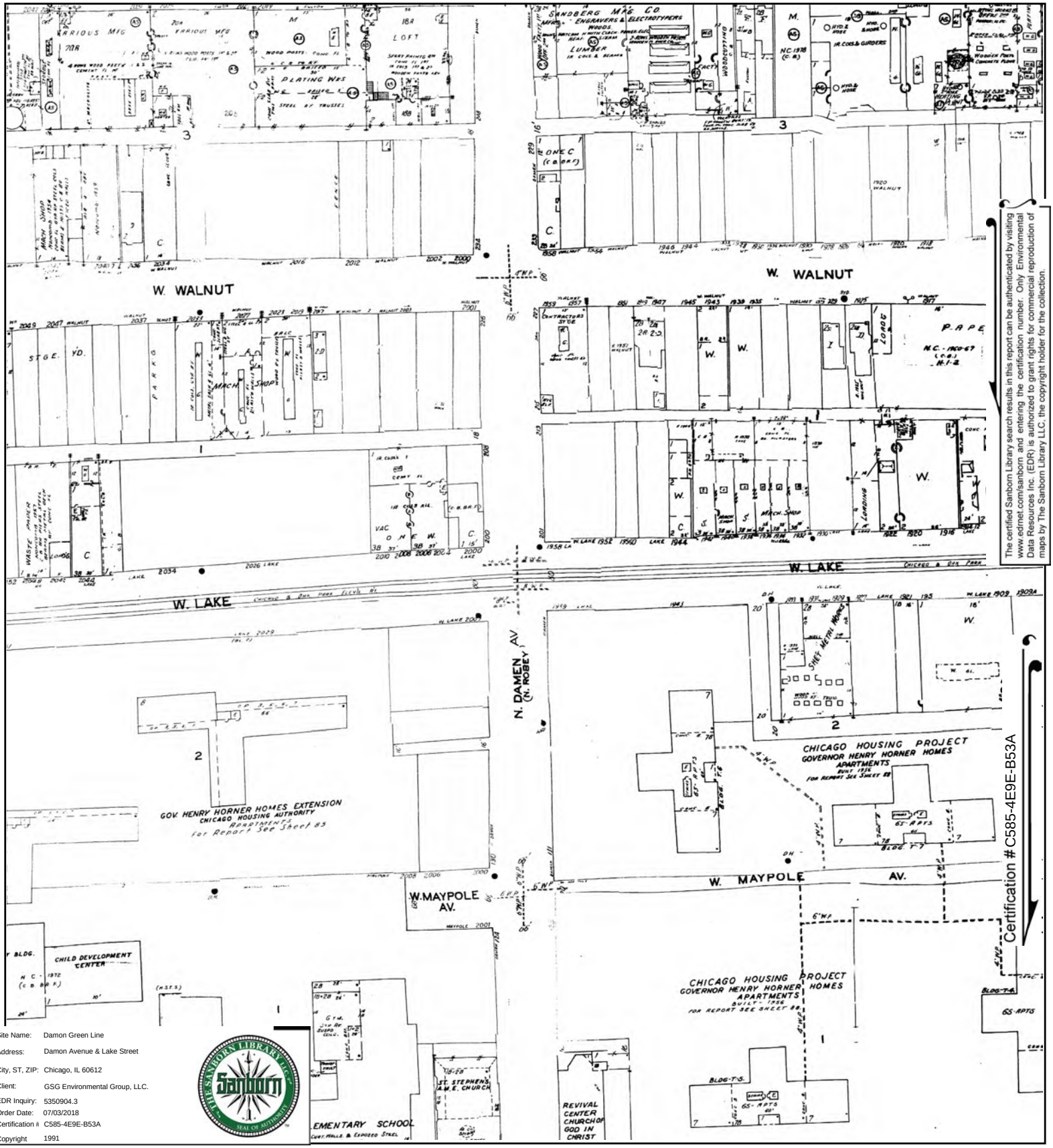

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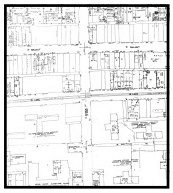

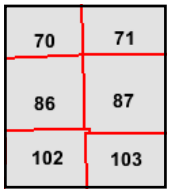

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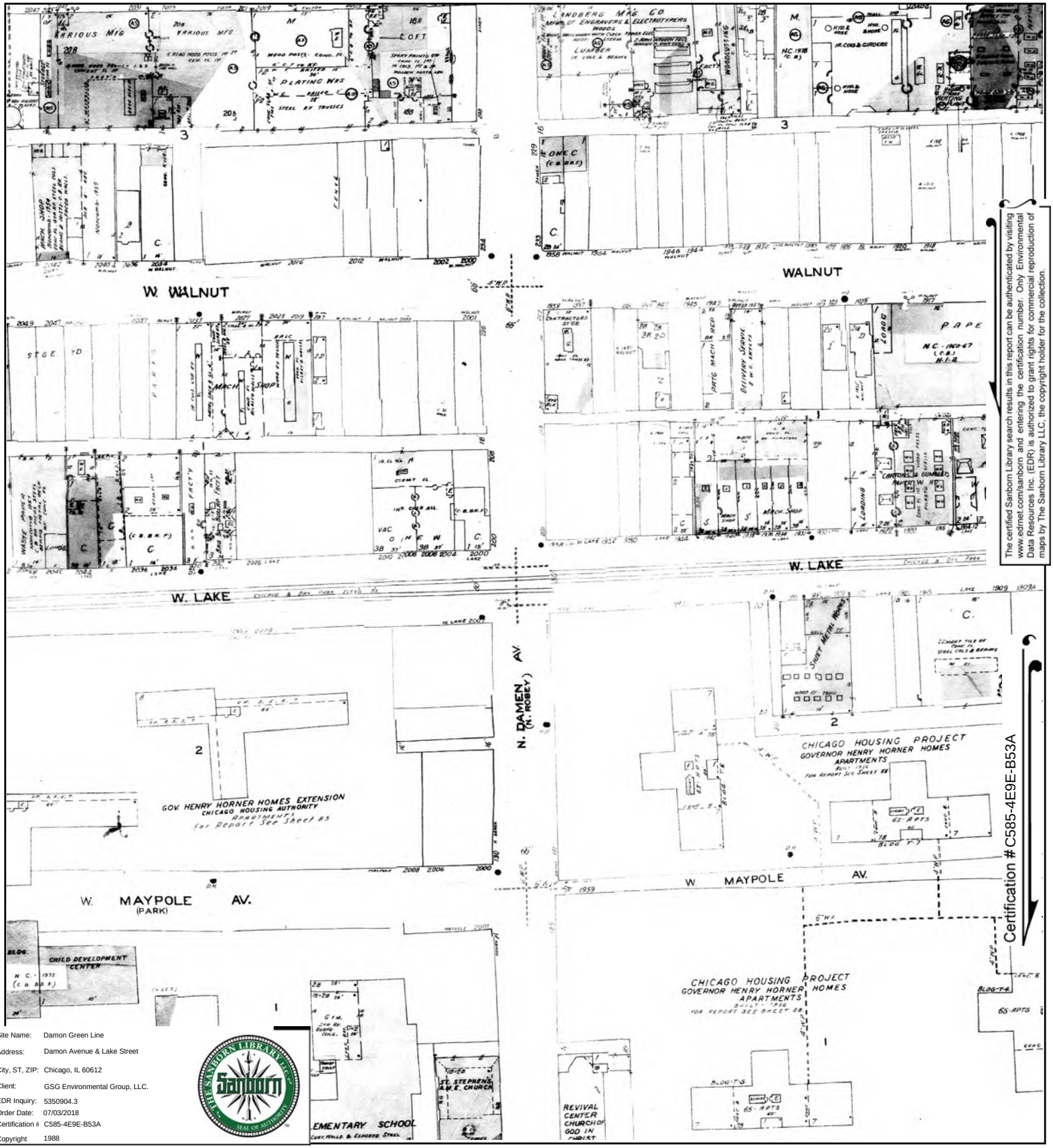

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Copyright	1988

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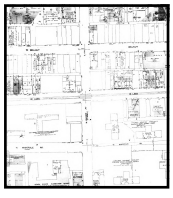

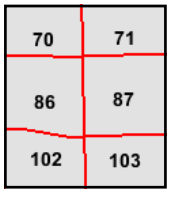

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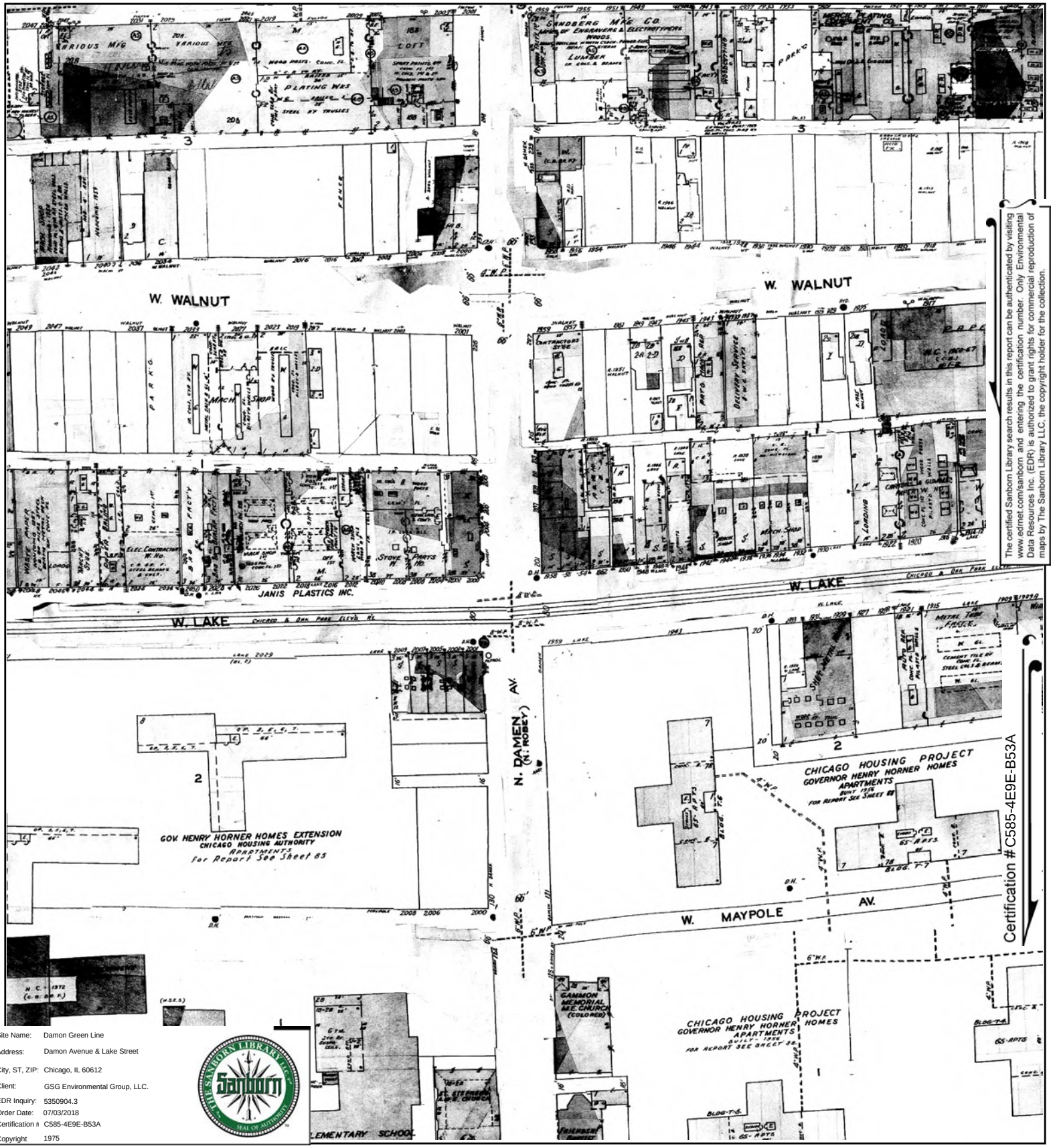

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Copyright	1975

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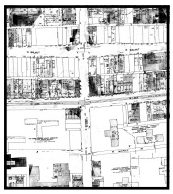

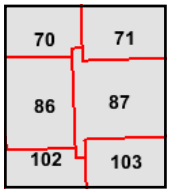

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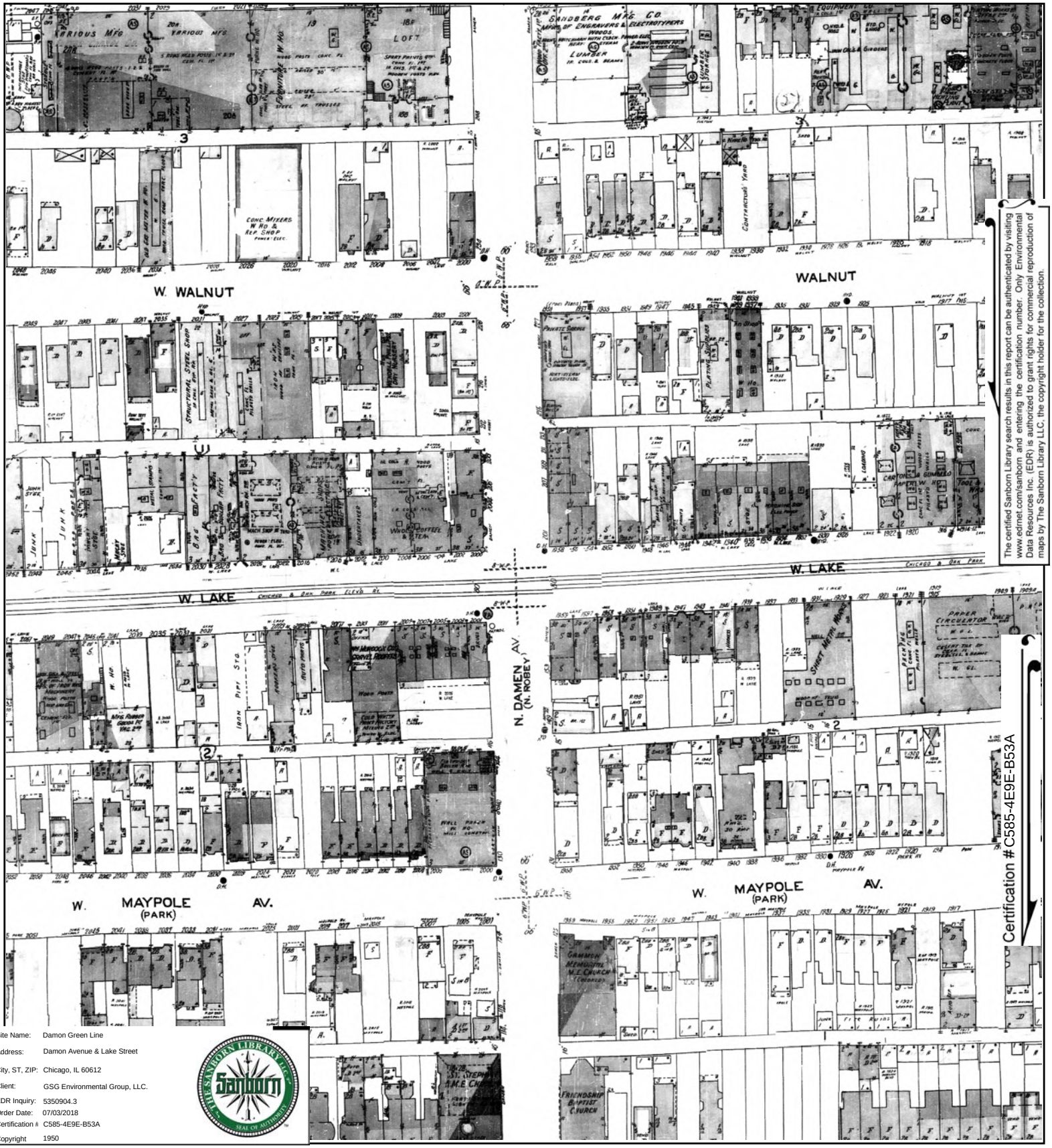

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Certification #:	C585-4E9E-B53A
Copyright	1950

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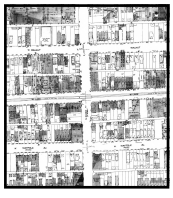

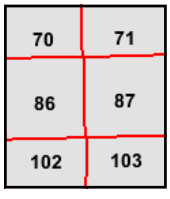

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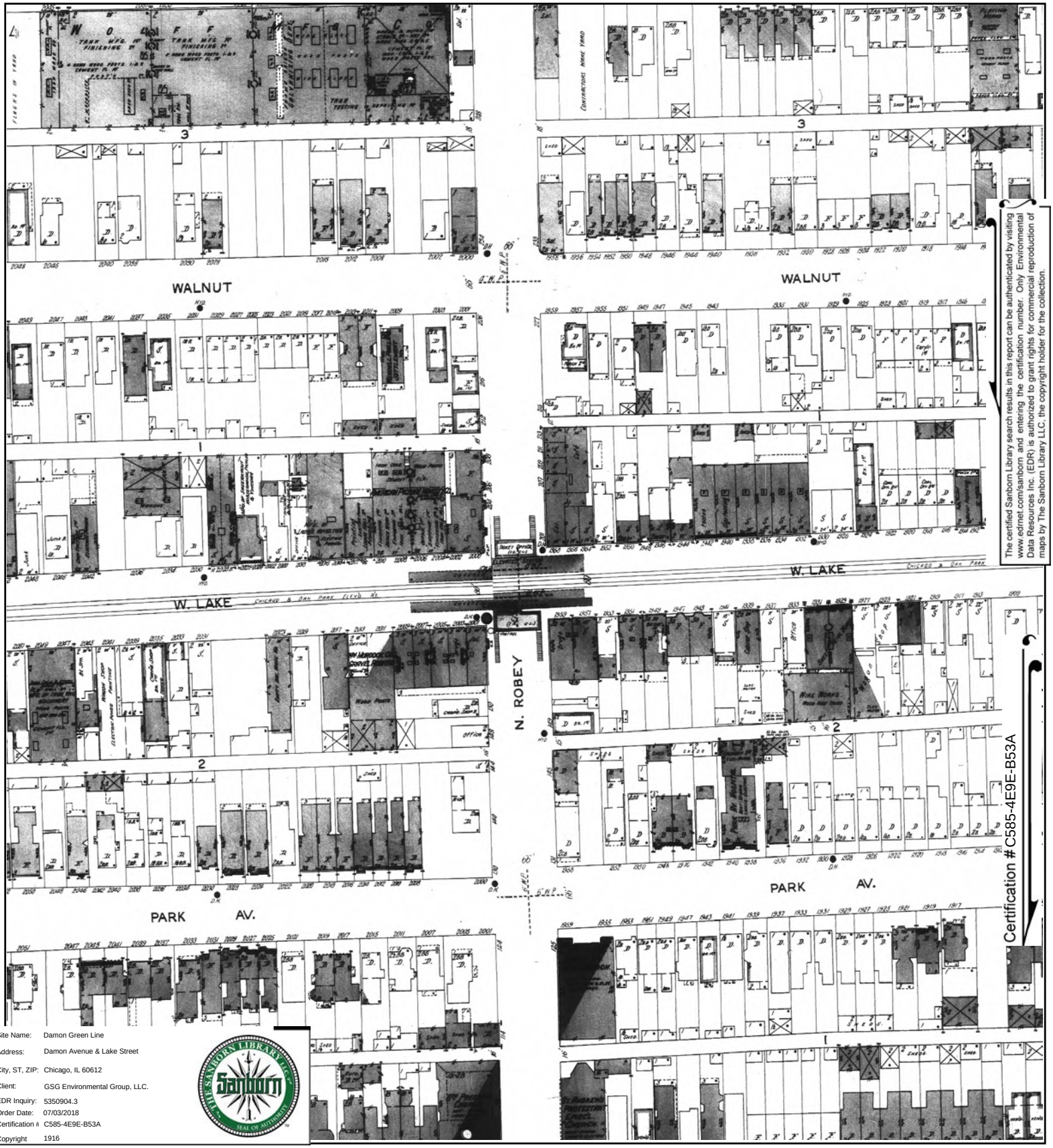

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Order Date:	07/03/2018
Certification #	C585-4E9E-B53A
Copyright	1916

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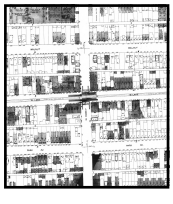

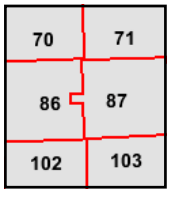

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N

APPENDIX D

Regulatory Database Information

Damon Green Line
Damon Avenue & Lake Street
Chicago, IL 60612

Inquiry Number: 5350904.2s
July 02, 2018

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

DAMON AVENUE & LAKE STREET
CHICAGO, IL 60612

COORDINATES

Latitude (North):	41.8849970 - 41° 53' 5.98''
Longitude (West):	87.6767460 - 87° 40' 36.28''
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	443851.0
UTM Y (Meters):	4637015.5
Elevation:	597 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5681444 CHICAGO LOOP, IL
Version Date:	2012
South Map:	5681448 ENGLEWOOD, IL
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20150822
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
DAMON AVENUE & LAKE STREET
CHICAGO, IL 60612

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	HENRY HORNER HOMES R	1999 WEST LAKE STREE	ENG CONTROLS, INST CONTROL, SRP	Higher	26, 0.005, South
A2	BROWN JOHN	2019 W LAKE	EDR Hist Auto	Higher	127, 0.024, WSW
A3	JOHN BROWN	2019 W LAKE ST	TANKS	Higher	127, 0.024, WSW
B4	UNIVERSITY HEALTH SC	2012 W LAKE ST	TANKS	Higher	174, 0.033, WNW
B5	UNIVERSITY HEALTH SC	2012 W LAKE ST	TANKS	Higher	174, 0.033, WNW
C6	MR. GEORGE SNIEDER	215 N DAMEN AVE	TANKS	Higher	287, 0.054, North
D7	J.A. BROWN	1952 W LAKE ST	TANKS	Higher	319, 0.060, East
D8	AVALOTIS PAINTING CO	1931 W LAKE ST	RCRA-SQG, FINDS, ECHO	Higher	351, 0.066, East
E9	STANDARD EQUIPMENT C	2033 W WALNUT ST	TANKS	Higher	354, 0.067, NW
E10	STANDARD EQUIPMENT	2033 W WALNUT	UST	Higher	354, 0.067, NW
E11	STANDARD EQUIPMENT	2033 W WALNUT ST	TANKS	Higher	354, 0.067, NW
E12	STANDARD EQUIPMENT	2033 W WALNUT ST	TANKS	Higher	354, 0.067, NW
E13	STANDARD EQUIPMENT C	2033 W WALNUT	RCRA-SQG, FINDS, ECHO	Higher	354, 0.067, NW
C14	KINZIE IND. DEVELOPM	2000-2034 WEST WALNU	LUST	Higher	380, 0.072, North
C15	CITY OF CHICAGO	2000 W WALNUT ST	TANKS	Higher	380, 0.072, North
C16	CITY OF CHICAGO	2000 W WALNUT ST	TANKS	Higher	380, 0.072, North
D17	HORN MARTIN	1923 LAKE	EDR Hist Auto	Higher	401, 0.076, East
D18	WING NEW	1939 W LAKE	EDR Hist Cleaner	Higher	409, 0.077, East
D19	NEW APARTMENT BUILDI	1939 W LAKE ST	TANKS	Higher	409, 0.077, East
F20	RUSSELL AUBREY	2042 LAKE	EDR Hist Cleaner	Higher	421, 0.080, West
G21	VERHOEF WALTER B	1905 07 W LAKE	EDR Hist Auto	Higher	448, 0.085, East
G22	AUTO CLINIC & TOWING	1915 W LAKE	EDR Hist Auto	Higher	448, 0.085, East
G23	ACTIVE MOTOR GARAGE	1901 W LAKE	EDR Hist Auto	Higher	448, 0.085, East
F24	LENN GARDON	2046 W LAKE ST	TANKS	Higher	497, 0.094, West
G25	KEMP LOUIS J	1913 LAKE	EDR Hist Cleaner	Higher	498, 0.094, East
G26	KILTER CARTAGE COMPA	1915 W LAKE ST	TANKS	Higher	511, 0.097, East
H27	VACANT PROPERTY	2034 W WALNUT ST	TANKS	Higher	540, 0.102, NW
H28	VACANT PROPERTY	2034 W WALNUT THRID	UST	Higher	540, 0.102, NW
H29	ENTERPRISE BRASS FOU	2038 W WALNUT ST	TANKS	Higher	575, 0.109, NW
I30	ACME CARTAGE	1901 W LAKE ST	TANKS	Higher	588, 0.111, East
I31	1901 W LAKE ST, LLC	1901 WEST LAKE STREE	LUST	Higher	588, 0.111, East
I32	COMMERCIAL BUILDING	1901 WEST LAKE STREE	UST	Higher	588, 0.111, East
33	1900-1948 WEST WALNU	1918 WEST WALNUT STR	ENG CONTROLS, INST CONTROL, SRP	Higher	595, 0.113, NE
H34	LUCKY PENNY METAL PR	2042 W WALNUT ST	UST, BOL	Higher	601, 0.114, NW
H35	L & M MACHINE COMPAN	2042 W WALNUT ST	TANKS	Higher	601, 0.114, NW
J36	STEVE PARK	1959 W FULTON ST	TANKS	Higher	614, 0.116, North
J37	PARK, STEVE	1959 WEST FULTON STR	LUST	Higher	614, 0.116, North
J38	STEVE PARK	1959 W FULTON	UST	Higher	614, 0.116, North
J39	SANDBERG MANUFACTURI	1957 W FULTON ST	TANKS	Higher	615, 0.116, North

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MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
40	C J KENEVAN	2110 W LAKE ST	TANKS	Higher	631, 0.120, West
K41	SUDLER HENRY SCHOOL	2022 W WASHINGTON BL	RCRA-CESQG	Lower	639, 0.121, SSW
K42	CHICAGO BOARD OF EDU	2022 W WASHINGTON ST	TANKS	Lower	639, 0.121, SSW
K43	J. H. WALLACE	2028 W WASHINGTON ST	TANKS	Lower	645, 0.122, SSW
L44	MZI GROUP, INC	1937 WEST FULTON STR	ENG CONTROLS, INST CONTROL, SRP, BOL	Higher	650, 0.123, NNE
45	FULTON CARROLL CTR	2021 W FULTON ST	UST	Higher	674, 0.128, NNW
J46	TIM'S AUTO	1956 W FULTON ST	TANKS	Higher	707, 0.134, North
J47	TIMS AUTO	1956 W FULTON	RCRA-SQG, UST, FINDS, ECHO	Higher	707, 0.134, North
J48	AMERICAN OIL	1956 W FULTON ST	TANKS	Higher	707, 0.134, North
L49	RECREATIONAL PRODUCT	1921 W FULTON	UST	Higher	726, 0.138, NNE
L50	MELLISH & MURRAY	1921 W FULTON ST	TANKS	Higher	726, 0.138, NNE
51	MIDWEST PAINTING & S	2040 W WASHINGTON ST	TANKS	Lower	734, 0.139, SW
M52	CITY OF CHICAGO	2100 W LAKE ST	TANKS	Higher	747, 0.141, West
M53	CITY OF CHICAGO	2100 W LAKE ST	TANKS	Higher	747, 0.141, West
N54	AETNA PLATING WORKS	245 N WOLCOTT AVE	RCRA-SQG, SRP, FINDS, ECHO, AIRS, BOL	Higher	763, 0.145, ENE
O55	HENRY HORNER HOMES A	1847 WEST LAKE STREE	LUST, ENG CONTROLS, INST CONTROL, SRP	Higher	783, 0.148, East
O56	HENRY HORNER HOMES I	1847 W LAKE ST	TANKS	Higher	783, 0.148, East
O57	HORNER HOMES IL 2-19	1847 W. LAKE	UST	Higher	783, 0.148, East
N58	BOREHERDT MOLT ERTRA	217 N WOLCOTT AVE	TANKS	Higher	786, 0.149, ENE
N59	BOREHERDT MOLT ERTRA	217 N WOLCOTT AVE	TANKS	Higher	786, 0.149, ENE
P60	BROCO PARTNERSHIP	1901-1933 WEST FULTO	SRP	Higher	789, 0.149, NE
P61	BROCO PARTNERSHIP	1901-1933 W FULTON S	RCRA NonGen / NLR	Higher	789, 0.149, NE
Q62	PARKING LOT	2101 W. WALNUT ST.	UST	Higher	797, 0.151, WNW
Q63	PARKING LOT	2101 W WALNUT ST	TANKS	Higher	797, 0.151, WNW
Q64	TUPLE A SPRE COMPANY	2101 W WALNUT ST	TANKS	Higher	797, 0.151, WNW
R65	INDUSTRIAL COUNSIL O	2053 W FULTON ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	805, 0.152, NW
R66	KINZIE IND. DEVELOPM	2053 WEST FULTON ST.	LUST	Higher	805, 0.152, NW
R67	INDUSTRIAL COUNCIL O	2053 WEST FULTON STR	SRP, SPILLS	Higher	805, 0.152, NW
R68	INDUST COUNCIL	2053 W FULTON	UST	Higher	805, 0.152, NW
R69	INDUSTRIAL COUNCIL O	2053 W FULTON ST	TANKS	Higher	805, 0.152, NW
R70	KINZIE INDUSTRIAL DE	2053 W FULTON ST	TANKS	Higher	805, 0.152, NW
71	ADAMS MFG CO	2034 W FULTON ST	RCRA NonGen / NLR, FINDS, ECHO	Higher	808, 0.153, NNW
R72	FULTON CARROLL PROPE	2051 WEST FULTON AVE	LUST	Higher	810, 0.153, NW
S73	HENRY HORNER HOMES	121 N. WOLCOTT STREE	UST	Higher	815, 0.154, ESE
S74	HENRY HORNER HOMES	121 N WOLCOTT AVE	TANKS	Higher	815, 0.154, ESE
M75	UNIFORM GRAINING COR	2120 W LAKE ST	RCRA-SQG	Higher	860, 0.163, West
76	MANKIND PROJECT CHIC	1900 WEST FULTON STR	ENG CONTROLS, INST CONTROL, SRP, BOL	Higher	969, 0.184, NE
T77	WILLIAM WINKLER	2107 W FULTON ST	TANKS	Higher	973, 0.184, NW
U78	P A JOHNSON	1845 W FULTON ST	TANKS	Higher	998, 0.189, NE

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V79	BOND CHEMICAL CO	2100 W FULTON	RCRA-SQG, FINDS, ECHO	Higher	1022, 0.194, NW
W80	INDUSTRIAL COUNCIL O	2023 W CARROLL AVE	RCRA-SQG	Higher	1025, 0.194, NNW
81	STANLEY SPRING	1850 W FULTON ST	TANKS	Higher	1032, 0.195, NE
U82	W O HOGAN	1843 W FULTON ST	TANKS	Higher	1038, 0.197, NE
U83	W O HOGAN	1843 W FULTON ST	TANKS	Higher	1038, 0.197, NE
X84	G & G REAL ESTATE PA	1948 W CARROLL AVE	TANKS	Higher	1042, 0.197, North
W85	SRAM CORP	2039 W CARROLL AVE	RCRA-CESQG, FINDS, ECHO	Higher	1044, 0.198, NNW
Y86	WESTERN RUST PROOF C	2131 W WALNUT ST	TANKS	Higher	1045, 0.198, WNW
X87	G&G REAL ESTATE PART	1958 WEST CARROLL AV	UST	Higher	1053, 0.199, North
T88		2119 W FULTON ST	TANKS	Higher	1054, 0.200, WNW
89	VILOS MOGES	2000 W CARROLL AVE	TANKS	Higher	1055, 0.200, North
Z90	HENRY HORNER HOMES	1813 W. LAKE STREET	UST	Higher	1060, 0.201, East
AA91	M. J. SIEVERT CARTAG	2014 W CARROLL AVE	TANKS	Higher	1061, 0.201, NNW
AA92	M. J. SIEVERT CARTAG	2014 W CARROLL AVE	TANKS	Higher	1061, 0.201, NNW
AA93	M. J. SIEVERT CARTAG	2014 W CARROLL AVE	TANKS	Higher	1061, 0.201, NNW
X94	GUS BERTHOLD ELECTRI	1948-1958 WEST CARRO	LUST	Higher	1062, 0.201, North
X95	BERTHOLD GUS ELECTRI	1948 W CARROLL AV	RCRA NonGen / NLR, FINDS	Higher	1062, 0.201, North
AB96	LAKEWOOD ENGINEERING	1901 W CARROLL	LUST, SRP, RCRA NonGen / NLR, FINDS, ECHO	Higher	1081, 0.205, NNE
AB97	1901 W CARROLL LLC	1901 W CARROLL AVE	TANKS	Higher	1081, 0.205, NNE
AB98	THE HERST ALLEN COMP	1901 W CARROLL AVE	TANKS	Higher	1081, 0.205, NNE
AC99	STANDARD OIL	2055 W WARREN AVE	TANKS	Lower	1082, 0.205, SSW
AC100	STANDARD OIL	2055 W WARREN AVE	TANKS	Lower	1082, 0.205, SSW
T101	WINKLER MOTOR SERVIC	2110 W FULTON ST	TANKS	Higher	1082, 0.205, NW
AD102	LAKE STREET LANDSCAP	1810 W LAKE ST	TANKS	Higher	1082, 0.205, East
AD103	APEX SHYTIGHT COMPAN	1810 W LAKE ST	TANKS	Higher	1082, 0.205, East
V104	GENERAL SURFACE HARD	2108 W FULTON	RCRA NonGen / NLR, FINDS, ECHO	Higher	1084, 0.205, NW
V105	ROWIN CORPORATION	2108 W FULTON ST	TANKS	Higher	1084, 0.205, NW
Y106	WILLIAM FRITT	2132 W WALNUT ST	TANKS	Higher	1092, 0.207, WNW
107	REV WALLACE E CONKLI	48 N HOYNE AVE	TANKS	Lower	1096, 0.208, SW
T108	WILLIAM KRITT	2121 W FULTON ST	TANKS	Higher	1098, 0.208, NW
AD109	AMERICAN PLATING SIT	1820 WEST LAKE STREE	SEMS, RCRA NonGen / NLR	Higher	1098, 0.208, East
AA110	VACANT RENTAL SPACE	2026 W CARROLL AVE	TANKS	Higher	1105, 0.209, NNW
AA111	UNKNOWN	2026 W CARROLL AVE	TANKS	Higher	1105, 0.209, NNW
AA112	KRITT WILLIAM	2026 W CARROLL	UST	Higher	1105, 0.209, NNW
W113	GOODMAN THEATRE	2030-40 W CARROLL	UST	Higher	1107, 0.210, NNW
W114	FULTON-CARROLL INDUS	2030 W CARROLL AVE	TANKS	Higher	1107, 0.210, NNW
Y115	KEHOE INVESTMENTS, L	2137 WEST WALNUT STR	ENG CONTROLS, INST CONTROL, SRP, BOL	Higher	1110, 0.210, WNW
116	SUPERIOR PRODUCT INC	2133 W FULTON ST	TANKS	Higher	1123, 0.213, WNW
Z117	CHICAGO HOUSING AUTH	1807-1813 WEST LAKE	LUST	Higher	1124, 0.213, East

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W118	WILLIAM KRITT	2040 W CARROLL	UST	Higher	1148, 0.217, NNW
W119	GOODMAN GROUP	2040 W CARROLL AVE	TANKS	Higher	1148, 0.217, NNW
W120	W. KRITT PROPERTIES	2040 WEST CARROLL	LUST	Higher	1148, 0.217, NNW
W121	GOODMAN THEATER SCEN	2040 W CARROLL B	RCRA-CESQG, FINDS, ECHO	Higher	1148, 0.217, NNW
122	HENRY HORNER HOMES	1820 W WASHINGTON BL	TANKS	Lower	1149, 0.218, ESE
123	BROMANN BROTHERS	1838 W FULTON ST	TANKS	Higher	1156, 0.219, NE
AE124	GUS BERTHOLD ELEC. C	1900 W. CARROLL AVEN	RCRA-SQG, FINDS, ECHO	Higher	1170, 0.222, NNE
AE125	GUS. BARTHOLD ELECTR	1900 W CARROLL AVE	TANKS	Higher	1170, 0.222, NNE
AF126	STANLY SPRING COMPAN	1859 W CARROLL AVE	TANKS	Higher	1187, 0.225, NE
AF127	STANLY SPRING COMPAN	1859 W CARROLL AVE	TANKS	Higher	1187, 0.225, NE
AG128	CASE MOODY PIE COMPA	1818 W WALNUT ST	TANKS	Higher	1190, 0.225, ENE
AG129	CASE MOODY PIE COMPA	1818 W WALNUT ST	TANKS	Higher	1190, 0.225, ENE
AH130	KALPAKE PAUL AND KEN	2101 W CARROL	RCRA NonGen / NLR, FINDS, ECHO	Higher	1192, 0.226, NW
AF131	BERQUIST PLATING CO	1857-63 W CARROLL	RCRA NonGen / NLR, FINDS, ECHO	Higher	1207, 0.229, NE
AI132	J.L. SCHEFFLER	1823 W FULTON ST	TANKS	Higher	1225, 0.232, ENE
AF133	ARRIATO MUTUAL PLATE	1847 W CARROLL AVE	TANKS	Higher	1236, 0.234, NE
AJ134	JOHN KARTIAS	2000 W MADISON ST	TANKS	Lower	1272, 0.241, South
AJ135	JOHN KARTIAS	2000 W MADISON ST	TANKS	Lower	1272, 0.241, South
136	AMERICAN PLATING	1800-1858 WEST LAKE	ENG CONTROLS, INST CONTROL, SRP	Higher	1295, 0.245, East
AH137	WEST LAKE PARTNERS	2114 W CARROLL AVE	TANKS	Higher	1311, 0.248, NW
AH138	WEST LAKE PARTNERS I	2114-2138 W CARROLL	UST, BOL	Higher	1311, 0.248, NW
AI139	J.L. SCHEFFLER	1813-1817 WEST FULTO	LUST	Higher	1322, 0.250, ENE
140	HENRY HORNER HOMES R	1804 WEST WASHINGTON	LUST, UST	Lower	1382, 0.262, ESE
141	J.L. SCHEFFLER TRANS	1801 WEST FULTON ST.	LUST	Higher	1401, 0.265, ENE
142	CAST RITE STEEL CAST	2135 WEST CARROLL AV	ENG CONTROLS, INST CONTROL, SRP, ASBESTOS, BOL	Higher	1407, 0.266, NW
143	CHA-HENRY HORNER HOM	2215 WEST LAKE STREE	ENG CONTROLS, INST CONTROL, SRP	Higher	1417, 0.268, West
144	M.J. SEIWERT CARTAGE	2029 WEST HUBBARD ST	LUST	Higher	1535, 0.291, NNW
145	AVRAM BUILDERS LLC	1745 WEST WALNUT STR	ENG CONTROLS, INST CONTROL, SRP, BOL	Higher	1544, 0.292, ENE
146	UNITED BINDERY SERVI	1805 WEST CARROLL ST	LUST	Higher	1549, 0.293, NE
147	2221 WEST WALNUT, LL	2221 WEST WALNUT AVE	ENG CONTROLS, INST CONTROL, SRP	Higher	1597, 0.302, West
148	HENRY HORNER HOMES A	150 N HERMITAGE	ENG CONTROLS, INST CONTROL, SRP, RCRA NonGen /...	Higher	1602, 0.303, East
149	WEST VILLAGE HOMES	2155-2159 WEST WARRE	INST CONTROL, SRP	Lower	1638, 0.310, SW
150	TRI-STATE METALS	1745 FULTON ST.	LUST	Higher	1663, 0.315, ENE
AK151	BELL CHEMICAL CO	411 N WOLCOTT AVE	LUST, RCRA NonGen / NLR	Higher	1667, 0.316, NNE
152	METRO CHICAGO SPORTS	1800 WEST MADISON	LUST	Lower	1768, 0.335, SE
AK153	RUBICON X WALCOTT, L	431 NORTH WALCOTT AV	LUST	Higher	1778, 0.337, NNE
154	2000 HUBBARD, LLC	2000 WEST HUBBARD ST	LUST	Higher	1803, 0.341, North
155	MIDWEST WRECKING COM	1950 WEST HUBBARD ST	LUST, SRP	Higher	1809, 0.343, North
156	CHICAGO, CITY OF	10 NORTH LEAVITT	LUST	Lower	1810, 0.343, SW

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157	CHICAGO MAILING TUBE	400 NORTH LEAVITT ST	LUST	Higher	1880, 0.356, NW
158	CHICAGO TRANSIT AUTH	1717 WEST WASHINGTON	LUST	Lower	1968, 0.373, ESE
AL159	CALCO PLATING CO	414 N WOOD ST	INST CONTROL, SRP, AIRS, BOL	Higher	1997, 0.378, NE
160	CLEARWATER FISHERIES	2300-2340 WEST LAKE	ENG CONTROLS, INST CONTROL, SRP	Lower	2009, 0.380, West
161	A EICOFF CO.	2027 WEST GRAND	LUST	Higher	2062, 0.391, North
AL162	GEORGE JEWELL SERVIC	424 NORTH WOOD ST.	LUST	Higher	2062, 0.391, NE
163	CHICAGO EMBROIDERY C	418 NORTH LEAVITT	LUST, UST	Higher	2075, 0.393, NW
164	2200 LLC/2200 WEST M	2220 WEST MADISON ST	LUST	Lower	2107, 0.399, SW
165	NATIONAL WASTE SERVI	1700 WEST CARROLL ST	LUST	Higher	2187, 0.414, ENE
166	ALBANY STEEL & BRASS	1940 WEST GRAND AVEN	ENG CONTROLS, INST CONTROL, SRP	Higher	2189, 0.415, North
AM167	LANCER CORP.	339 NORTH OAKLEY	LUST	Higher	2189, 0.415, WNW
168	WARREN PAULINA STAND	1701 WEST WARREN BLV	LUST	Lower	2212, 0.419, ESE
169	MIDWEST ELECTRIC MFG	1639 W WALNUT	SEMS-ARCHIVE, CORRACTS, LUST, ENG CONTROLS, INST..	Higher	2239, 0.424, East
AM170	STOCK YARDS PACKING	340 NORTH OAKLEY BOU	ENG CONTROLS, INST CONTROL, SRP	Higher	2256, 0.427, WNW
AN171	MALCOLM X PARKING LO	1907-1909 WEST ADAMS	LUST	Lower	2313, 0.438, South
AO172	GAYNES TESTING LABOR	1642 WEST FULTON STR	ENG CONTROLS, INST CONTROL, SRP	Higher	2323, 0.440, ENE
AO173	GAYNES, CHESTER	1642-1652 WEST FULTO	LUST	Higher	2323, 0.440, ENE
174	CHICAGO MAILING TUBE	1658 CARROLL AVE	LUST, BOL	Higher	2345, 0.444, ENE
175	MARCO LIGHTING CO	457 N LEAVITT	RCRA-SQG, LUST, FINDS, ECHO	Higher	2359, 0.447, NW
176	LAKE CITY CORES, INC	2324 WEST FULTON STR	LUST	Higher	2364, 0.448, WNW
177	BARCLAY MARINE DISTR	2332 WEST WALNUT	LUST	Higher	2366, 0.448, West
178	MCCRORY SENIOR APART	1637-1659 WEST WASHI	SRP	Lower	2402, 0.455, ESE
AN179	CITY COLLEGES OF CHI	216 SOUTH WINCHESTER	LUST	Lower	2424, 0.459, South
AP180	CHICAGO, CITY OF	2324 WEST MADISON	LUST	Lower	2453, 0.465, WSW
181	JODI DEVELOPMENT	2010 WEST RACE AVENU	LUST	Higher	2455, 0.465, North
AP182	CHICAGO, CITY OF	2320 WEST MADISON	LUST	Lower	2464, 0.467, WSW
AP183	CHICAGO, CITY OF DEP	2316 WEST MADISON	LUST	Lower	2475, 0.469, WSW
184	PEPPERCORN CAPITOL L	240 NORTH ASHLAND	LUST	Higher	2517, 0.477, ENE
185	ASHTRON IND.	1650 WEST KINZIE	LUST	Higher	2540, 0.481, NE
AQ186	1747 WEST GRAND CORP	1747 WEST GRAND AVEN	ENG CONTROLS, INST CONTROL, SRP	Higher	2543, 0.482, NE
AQ187	1751-1759 WEST GRAND	1751-1759 WEST GRAND	SRP	Higher	2551, 0.483, NNE
188	ACCESSORIES PLUS	1641 WEST CARROLL AV	ENG CONTROLS, INST CONTROL, SRP, BOL	Higher	2565, 0.486, ENE
189	UNITED AMERICAN AIRL	2246 WEST HUBBARD	LUST	Higher	2566, 0.486, NW
190	INSULATED PANEL CO.	421 PAULINA ST.	LUST	Higher	2595, 0.491, NE
191	ADVANCED PROCESS SUP	400 NORTH NOBLE STRE	SSU	Higher	4258, 0.806, ENE
192	UNIVERSITY OF ILLINO	715 S WOOD ST	CORRACTS, RCRA NonGen / NLR	Lower	4903, 0.929, SSE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

CCDD ---------- Clean Construction or Demolition Debris
SWF/LF ---------- Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge

LF SPECIAL WASTE ..... Special Waste Site List
IL NIPC ..... Solid Waste Landfill Inventory

State and tribal leaking storage tank lists

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land
LUST TRUST ..... Underground Storage Tank Fund Payment Priority List

State and tribal registered storage tank lists

FEMA UST ..... Underground Storage Tank Listing
AST ..... Above Ground Storage Tanks
INDIAN UST ..... Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

INDIAN VCP ..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ..... Municipal Brownfields Redevelopment Grant Program Project Descriptions

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI ..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ..... Torres Martinez Reservation Illegal Dump Site Locations
ODI ..... Open Dump Inventory
IHS OPEN DUMPS ..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ..... Delisted National Clandestine Laboratory Register
CDL ..... Meth Drug Lab Site Listing
US CDL ..... National Clandestine Laboratory Register

Local Land Records

LIENS 2 ..... CERCLA Lien Information

Records of Emergency Release Reports

HMIRS ..... Hazardous Materials Information Reporting System
SPILLS ..... State spills
SPILLS 90 ..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

FUDS ..... Formerly Used Defense Sites

EXECUTIVE SUMMARY

DOD ---- Department of Defense Sites
SCRD DRYCLEANERS ---- State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR ---- Financial Assurance Information
EPA WATCH LIST ---- EPA WATCH LIST
2020 COR ACTION ---- 2020 Corrective Action Program List
TSCA ---- Toxic Substances Control Act
TRIS ---- Toxic Chemical Release Inventory System
SSTS ---- Section 7 Tracking Systems
ROD ---- Records Of Decision
RMP ---- Risk Management Plans
RAATS ---- RCRA Administrative Action Tracking System
PRP ---- Potentially Responsible Parties
PADS ---- PCB Activity Database System
ICIS ---- Integrated Compliance Information System
FTTS ---- FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS ---- Material Licensing Tracking System
COAL ASH DOE ---- Steam-Electric Plant Operation Data
COAL ASH EPA ---- Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER ---- PCB Transformer Registration Database
RADINFO ---- Radiation Information Database
HIST FTTS ---- FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS ---- Incident and Accident Data
CONSENT ---- Superfund (CERCLA) Consent Decrees
INDIAN RESERV ---- Indian Reservations
FUSRAP ---- Formerly Utilized Sites Remedial Action Program
UMTRA ---- Uranium Mill Tailings Sites
LEAD SMELTERS ---- Lead Smelter Sites
US AIRS ---- Aerometric Information Retrieval System Facility Subsystem
US MINES ---- Mines Master Index File
ABANDONED MINES ---- Abandoned Mines
FINDS ---- Facility Index System/Facility Registry System
UXO ---- Unexploded Ordnance Sites
ECHO ---- Enforcement & Compliance History Information
DOCKET HWC ---- Hazardous Waste Compliance Docket Listing
FUELS PROGRAM ---- EPA Fuels Program Registered Listing
AIRS ---- Air Inventory Listing
ASBESTOS ---- ASBESTOS
BOL ---- Bureau of Land Inventory Database
CHICAGO ENV ---- Environmental Records Dataset
COAL ASH ---- Coal Ash Site Listing
DRYCLEANERS ---- Illinois Licensed Drycleaners
Financial Assurance ---- Financial Assurance Information Listing
HWAR ---- Hazard Waste Annual Report
IMPDMENT ---- Surface Impoundment Inventory
NPDES ---- A Listing of Active Permits
PIMW ---- Potentially Infectious Medical Waste
TIER 2 ---- Tier 2 Information Listing
UIC ---- Underground Injection Wells

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP ---- EDR Proprietary Manufactured Gas Plants

EXECUTIVE SUMMARY

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS ---------- Recovered Government Archive State Hazardous Waste Facilities List
RGA LF ---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST ---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS list

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 05/18/2018 has revealed that there is 1 SEMS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMERICAN PLATING SIT	***1820 WEST LAKE STREE***	***E 1/8 - 1/4 (0.208 mi.)***	***AD109***	***95***

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status

indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

A review of the SEMS-ARCHIVE list, as provided by EDR, and dated 05/18/2018 has revealed that there is 1 SEMS-ARCHIVE site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MIDWEST ELECTRIC MFG	***1639 W WALNUT***	***E 1/4 - 1/2 (0.424 mi.)***	***169***	***192***

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/01/2018 has revealed that there are 2 CORRACTS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
MIDWEST ELECTRIC MFG	***1639 W WALNUT***	***E 1/4 - 1/2 (0.424 mi.)***	***169***	***192***
Lower Elevation	**Address**	**Direction / Distance**	**Map ID**	**Page**
UNIVERSITY OF ILLINO	***715 S WOOD ST***	***SSE 1/2 - 1 (0.929 mi.)***	***192***	***217***

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 8 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AVALOTIS PAINTING CO	***1931 W LAKE ST***	***E 0 - 1/8 (0.066 mi.)***	***D8***	***13***
STANDARD EQUIPMENT C	***2033 W WALNUT***	***NW 0 - 1/8 (0.067 mi.)***	***E13***	***17***
TIMS AUTO	***1956 W FULTON***	***N 1/8 - 1/4 (0.134 mi.)***	***J47***	***38***
AETNA PLATING WORKS	***245 N WOLCOTT AVE***	***ENE 1/8 - 1/4 (0.145 mi.)***	***N54***	***44***
UNIFORM GRAINING COR	2120 W LAKE ST	W 1/8 - 1/4 (0.163 mi.)	M75	67
BOND CHEMICAL CO	***2100 W FULTON***	***NW 1/8 - 1/4 (0.194 mi.)***	***V79***	***71***
INDUSTRIAL COUNCIL O	2023 W CARROLL AVE	NNW 1/8 - 1/4 (0.194 mi.)	W80	73
GUS BERTHOLD ELEC. C	***1900 W. CARROLL AVEN***	***NNE 1/8 - 1/4 (0.222 mi.)***	***AE124***	***112***

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 03/01/2018 has revealed that there are 3 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SRAM CORP	***2039 W CARROLL AVE***	***NNW 1/8 - 1/4 (0.198 mi.)***	***W85***	***76***
GOODMAN THEATER SCEN	***2040 W CARROLL B***	***NNW 1/8 - 1/4 (0.217 mi.)***	***W121***	***109***

Lower Elevation	Address	Direction / Distance	Map ID	Page
SUDLER HENRY SCHOOL	2022 W WASHINGTON BL	SSW 0 - 1/8 (0.121 mi.)	K41	32

State- and tribal - equivalent CERCLIS

SSU: The State Response Action Program database identifies the status of all sites under the responsibility of the Illinois EPA's State Sites Unit.

A review of the SSU list, as provided by EDR, and dated 05/02/2018 has revealed that there is 1 SSU site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
ADVANCED PROCESS SUP SSU Status: Backlog Facility Id: 0316005411 Facility Id: 0316005411	400 NORTH NOBLE STRE	ENE 1/2 - 1 (0.806 mi.)	191	217

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Illinois Environmental Protection Agency's LUST Incident Report.

A review of the LUST list, as provided by EDR, and dated 04/23/2018 has revealed that there are 47 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
KINZIE IND. DEVELOPM Incident Num: 951894 IL EPA Id: 316286327	2000-2034 WEST WALNU	N 0 - 1/8 (0.072 mi.)	C14	19
1901 W LAKE ST, LLC NFA/NFR Letter: 2015-08-14 Incident Num: 20150677 IL EPA Id: 316275374	1901 WEST LAKE STREE	E 0 - 1/8 (0.111 mi.)	I31	25
PARK, STEVE	1959 WEST FULTON STR	N 0 - 1/8 (0.116 mi.)	J37	30

NFA/NFR Letter: 2003-06-12 Incident Num: 20000079 IL EPA Id: 316275181				
HENRY HORNER HOMES A NFA/NFR Letter: 1998-04-03 Incident Num: 962085 IL EPA Id: 316275115	***1847 WEST LAKE STREE***	***E 1/8 - 1/4 (0.148 mi.)***	***O55***	***47***
KINZIE IND. DEVELOPM Incident Num: 951893 IL EPA Id: 316286328	2053 WEST FULTON ST.	NW 1/8 - 1/4 (0.152 mi.)	R66	59
FULTON CARROLL PROPE NFA/NFR Letter: 1999-02-22 Incident Num: 911763 IL EPA Id: 316225056	2051 WEST FULTON AVE	NW 1/8 - 1/4 (0.153 mi.)	R72	65
GUS BERTHOLD ELECTRI NFA/NFR Letter: 2004-08-20 Incident Num: 20002006 IL EPA Id: 316275042	1948-1958 WEST CARRO	N 1/8 - 1/4 (0.201 mi.)	X94	83
LAKEWOOD ENGINEERING Incident Num: 980115 Incident Num: 20071299 Incident Num: 942167 IL EPA Id: 316275087	***1901 W CARROLL***	***NNE 1/8 - 1/4 (0.205 mi.)***	***AB96***	***85***
CHICAGO HOUSING AUTH NFA/NFR Letter: 2008-11-14 Incident Num: 20061556 IL EPA Id: 316246378	1807-1813 WEST LAKE	E 1/8 - 1/4 (0.213 mi.)	Z117	105
W. KRITT PROPERTIES Incident Num: 931073 IL EPA Id: 316275135	2040 WEST CARROLL	NNW 1/8 - 1/4 (0.217 mi.)	W120	109
J.L. SCHEFFLER NFA/NFR Letter: 2004-03-12 Incident Num: 20031366 IL EPA Id: 316275235	1813-1817 WEST FULTO	ENE 1/4 - 1/2 (0.250 mi.)	AI139	128
J.L. SCHEFFLER TRANS NFA/NFR Letter: 2003-02-03 Incident Num: 20021074 IL EPA Id: 316275216	1801 WEST FULTON ST.	ENE 1/4 - 1/2 (0.265 mi.)	141	129
M.J. SEIWERT CARTAGE NFA/NFR Letter: 1999-07-14 Incident Num: 980338 IL EPA Id: 316275141	2029 WEST HUBBARD ST	NNW 1/4 - 1/2 (0.291 mi.)	144	136
UNITED BINDERY SERVI NFA/NFR Letter: 2006-03-30 Incident Num: 960709 IL EPA Id: 316275099	1805 WEST CARROLL ST	NE 1/4 - 1/2 (0.293 mi.)	146	140
TRI-STATE METALS NFA/NFR Letter: 2015-01-22 Incident Num: 991128 IL EPA Id: 316270019	1745 FULTON ST.	ENE 1/4 - 1/2 (0.315 mi.)	150	150
BELL CHEMICAL CO	***411 N WOLCOTT AVE***	***NNE 1/4 - 1/2 (0.316 mi.)***	***AK151***	***151***

NFA/NFR Letter: 2005-06-22 NFA/NFR Letter: 1992-11-30 Incident Num: 891997 Incident Num: 922379 IL EPA Id: 316245037				
RUBICON X WALCOTT, L NFA/NFR Letter: 2017-12-21 Incident Num: 20170792 IL EPA Id: 316246445	431 NORTH WALCOTT AV	NNE 1/4 - 1/2 (0.337 mi.)	AK153	155
2000 HUBBARD, LLC NFA/NFR Letter: 2005-05-04 Incident Num: 20041754 IL EPA Id: 316275184	2000 WEST HUBBARD ST	N 1/4 - 1/2 (0.341 mi.)	154	155
MIDWEST WRECKING COM Incident Num: 20130690 IL EPA Id: 316240023	***1950 WEST HUBBARD ST***	***N 1/4 - 1/2 (0.343 mi.)***	***155***	***156***
CHICAGO MAILING TUBE Incident Num: 941910 IL EPA Id: 316006059	400 NORTH LEAVITT ST	NW 1/4 - 1/2 (0.356 mi.)	157	157
A EICOFF CO. NFA/NFR Letter: 2012-09-04 Incident Num: 902270 IL EPA Id: 316160013	2027 WEST GRAND	N 1/4 - 1/2 (0.391 mi.)	161	185
GEORGE JEWELL SERVIC NFA/NFR Letter: 1992-07-01 Incident Num: 913316 IL EPA Id: 316245121	424 NORTH WOOD ST.	NE 1/4 - 1/2 (0.391 mi.)	AL162	186
CHICAGO EMBROIDERY C NFA/NFR Letter: 2000-02-24 Incident Num: 983146 IL EPA Id: 316085332	***418 NORTH LEAVITT***	***NW 1/4 - 1/2 (0.393 mi.)***	***163***	***186***
NATIONAL WASTE SERVI Incident Num: 970155 Incident Num: 952237 IL EPA Id: 316003085	1700 WEST CARROLL ST	ENE 1/4 - 1/2 (0.414 mi.)	165	188
LANCER CORP. NFA/NFR Letter: 1992-06-26 Incident Num: 912103 IL EPA Id: 316275048	339 NORTH OAKLEY	WNW 1/4 - 1/2 (0.415 mi.)	AM167	191
MIDWEST ELECTRIC MFG NFA/NFR Letter: 1994-02-15 Incident Num: 930039 IL EPA Id: 316080001	***1639 W WALNUT***	***E 1/4 - 1/2 (0.424 mi.)***	***169***	***192***
GAYNES, CHESTER Incident Num: 961602 IL EPA Id: 316275110	1642-1652 WEST FULTO	ENE 1/4 - 1/2 (0.440 mi.)	AO173	203
CHICAGO MAILING TUBE NFA/NFR Letter: 1995-06-01 Incident Num: 950396 IL EPA Id: 316286307	***1658 CARROLL AVE***	***ENE 1/4 - 1/2 (0.444 mi.)***	***174***	***203***
MARCO LIGHTING CO	***457 N LEAVITT***	***NW 1/4 - 1/2 (0.447 mi.)***	***175***	***204***

NFA/NFR Letter: 1996-05-31 Incident Num: 920610 IL EPA Id: 316275052				
LAKE CITY CORES, INC NFA/NFR Letter: 2013-10-09 Incident Num: 20130738 IL EPA Id: 316275356	2324 WEST FULTON STR	WNW 1/4 - 1/2 (0.448 mi.)	176	206
BARCLAY MARINE DISTR NFA/NFR Letter: 2000-08-23 Incident Num: 992330 IL EPA Id: 316275177	2332 WEST WALNUT	W 1/4 - 1/2 (0.448 mi.)	177	207
JODI DEVELOPMENT Incident Num: 20040814 IL EPA Id: 316275245	2010 WEST RACE AVENU	N 1/4 - 1/2 (0.465 mi.)	181	209
PEPPERCORN CAPITOL L NFA/NFR Letter: 2013-03-27 Incident Num: 20121187 IL EPA Id: 316005306	240 NORTH ASHLAND	ENE 1/4 - 1/2 (0.477 mi.)	184	211
ASHTRON IND. Incident Num: 940569 IL EPA Id: 316246180	1650 WEST KINZIE	NE 1/4 - 1/2 (0.481 mi.)	185	211
UNITED AMERICAN AIRL Incident Num: 20010973 IL EPA Id: 316275197	2246 WEST HUBBARD	NW 1/4 - 1/2 (0.486 mi.)	189	216
INSULATED PANEL CO. NFA/NFR Letter: 1992-09-10 Incident Num: 921147 IL EPA Id: 316245128	421 PAULINA ST.	NE 1/4 - 1/2 (0.491 mi.)	190	216

Lower Elevation	Address	Direction / Distance	Map ID	Page
HENRY HORNER HOMES R NFA/NFR Letter: 2008-11-14 Incident Num: 20070521 IL EPA Id: 316275291	***1804 WEST WASHINGTON***	***ESE 1/4 - 1/2 (0.262 mi.)***	***140***	***128***
METRO CHICAGO SPORTS Incident Num: 931591 IL EPA Id: 316275066	1800 WEST MADISON	SE 1/4 - 1/2 (0.335 mi.)	152	154
CHICAGO, CITY OF Incident Num: 980934 IL EPA Id: 316275147	10 NORTH LEAVITT	SW 1/4 - 1/2 (0.343 mi.)	156	156
CHICAGO TRANSIT AUTH Incident Num: 20031095 IL EPA Id: 316275230	1717 WEST WASHINGTON	ESE 1/4 - 1/2 (0.373 mi.)	158	157
2200 LLC/2200 WEST M Incident Num: 20070162 IL EPA Id: 316275286	2220 WEST MADISON ST	SW 1/4 - 1/2 (0.399 mi.)	164	187
WARREN PAULINA STAND Incident Num: 932761 IL EPA Id: 316286246	1701 WEST WARREN BLV	ESE 1/4 - 1/2 (0.419 mi.)	168	191
MALCOLM X PARKING LO	1907-1909 WEST ADAMS	S 1/4 - 1/2 (0.438 mi.)	AN171	201

Incident Num: 20140385 IL EPA Id: 316275364				
CITY COLLEGES OF CHI Incident Num: 20131200 IL EPA Id: 316275359	216 SOUTH WINCHESTER	S 1/4 - 1/2 (0.459 mi.)	AN179	208
CHICAGO, CITY OF Incident Num: 991520 IL EPA Id: 316275175	2324 WEST MADISON	WSW 1/4 - 1/2 (0.465 mi.)	AP180	208
CHICAGO, CITY OF NFA/NFR Letter: 1994-12-06 Incident Num: 940617 IL EPA Id: 316286265	2320 WEST MADISON	WSW 1/4 - 1/2 (0.467 mi.)	AP182	209
CHICAGO, CITY OF DEP Incident Num: 20010552 Incident Num: 20010553 Incident Num: 20010738 IL EPA Id: 316275196	2316 WEST MADISON	WSW 1/4 - 1/2 (0.469 mi.)	AP183	210

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Illinois State Fire Marshal's STC Facility List.

A review of the UST list, as provided by EDR, and dated 04/23/2018 has revealed that there are 18 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
STANDARD EQUIPMENT Tank Status: Exempt from registration Status: EXEMPT Facility Id: 2035132	2033 W WALNUT	NW 0 - 1/8 (0.067 mi.)	E10	15
VACANT PROPERTY Tank Status: Exempt from registration Status: EXEMPT Facility Id: 2041041	2034 W WALNUT THRID	NW 0 - 1/8 (0.102 mi.)	H28	24
COMMERCIAL BUILDING Tank Status: Exempt from registration Status: EXEMPT Facility Id: 2045887	1901 WEST LAKE STREE	E 0 - 1/8 (0.111 mi.)	I32	26
LUCKY PENNY METAL PR Tank Status: Exempt from registration Status: EXEMPT Facility Id: 2036625	***2042 W WALNUT ST***	***NW 0 - 1/8 (0.114 mi.)***	***H34***	***28***
STEVE PARK Tank Status: Exempt from registration Status: EXEMPT Facility Id: 2039248	1959 W FULTON	N 0 - 1/8 (0.116 mi.)	J38	30
FULTON CARROLL CTR	2021 W FULTON ST	NNW 1/8 - 1/4 (0.128 mi.)	45	36

Tank Status: Exempt from registration Status: EXEMPT Facility Id: 2030751				
TIMS AUTO Tank Status: Exempt from registration Status: EXEMPT Facility Id: 2039941	***1956 W FULTON***	***N 1/8 - 1/4 (0.134 mi.)***	***J47***	***38***
RECREATIONAL PRODUCT Tank Status: Removed Status: CLOSED Facility Id: 2035122	1921 W FULTON	NNE 1/8 - 1/4 (0.138 mi.)	L49	41
HORNER HOMES IL 2-19 Tank Status: Removed Tank Status: Exempt from registration Status: CLOSED Facility Id: 2030457	1847 W. LAKE	E 1/8 - 1/4 (0.148 mi.)	O57	49
PARKING LOT Tank Status: Exempt from registration Status: EXEMPT Facility Id: 2044113	2101 W. WALNUT ST.	WNW 1/8 - 1/4 (0.151 mi.)	Q62	55
INDUST COUNCIL Tank Status: Does Not Exist Tank Status: Abandoned in place Tank Status: Exempt from registration Status: CLOSED Status: EXEMPT Facility Id: 2035156 Facility Id: 2036596	2053 W FULTON	NW 1/8 - 1/4 (0.152 mi.)	R68	60
HENRY HORNER HOMES Tank Status: Exempt from registration Status: EXEMPT Facility Id: 2043576	121 N. WOLCOTT STREE	ESE 1/8 - 1/4 (0.154 mi.)	S73	66
G&G REAL ESTATE PART Tank Status: Removed Status: CLOSED Facility Id: 2038607	1958 WEST CARROLL AV	N 1/8 - 1/4 (0.199 mi.)	X87	79
HENRY HORNER HOMES Tank Status: Exempt from registration Tank Status: Does Not Exist Status: EXEMPT Facility Id: 2043524	1813 W. LAKE STREET	E 1/8 - 1/4 (0.201 mi.)	Z90	80
KRITT WILLIAM Tank Status: Exempt from registration Status: EXEMPT Facility Id: 2031841	2026 W CARROLL	NNW 1/8 - 1/4 (0.209 mi.)	AA112	99
GOODMAN THEATRE Tank Status: Abandoned in place Status: CLOSED Facility Id: 2031839	2030-40 W CARROLL	NNW 1/8 - 1/4 (0.210 mi.)	W113	100
WILLIAM KRITT Tank Status: Exempt from registration	2040 W CARROLL	NNW 1/8 - 1/4 (0.217 mi.)	W118	106

Status: EXEMPT
Facility Id: 2035155

WEST LAKE PARTNERS I ***2114-2138 W CARROLL*** ***NW 1/8 - 1/4 (0.248 mi.)*** ***AH138*** ***127***
Tank Status: Exempt from registration
Status: EXEMPT
Facility Id: 2033262

TANKS: This dataset contains Aboveground Storage Tank (AST) and Underground Storage Tank (UST) information from the Department of Public Healtha??s (CDPH) Tank Asset Database. The Tank Asset Database contains tank information from CDPH AST and UST permit applications as well as UST records imported from the historic Department of Environment (DOE) database. This dataset also includes AST records from the historic DOE and pre-1992 UST records from the Building Department.

A review of the TANKS list, as provided by EDR, and dated 03/14/2018 has revealed that there are 76 TANKS sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
JOHN BROWN	2019 W LAKE ST	WSW 0 - 1/8 (0.024 mi.)	A3	11
UNIVERSITY HEALTH SC	2012 W LAKE ST	WNW 0 - 1/8 (0.033 mi.)	B4	11
UNIVERSITY HEALTH SC	2012 W LAKE ST	WNW 0 - 1/8 (0.033 mi.)	B5	12
MR. GEORGE SNIEDER	215 N DAMEN AVE	N 0 - 1/8 (0.054 mi.)	C6	12
J.A. BROWN	1952 W LAKE ST	E 0 - 1/8 (0.060 mi.)	D7	12
STANDARD EQUIPMENT C	2033 W WALNUT ST	NW 0 - 1/8 (0.067 mi.)	E9	15
STANDARD EQUIPMENT	2033 W WALNUT ST	NW 0 - 1/8 (0.067 mi.)	E11	16
STANDARD EQUIPMENT	2033 W WALNUT ST	NW 0 - 1/8 (0.067 mi.)	E12	16
CITY OF CHICAGO	2000 W WALNUT ST	N 0 - 1/8 (0.072 mi.)	C15	20
CITY OF CHICAGO	2000 W WALNUT ST	N 0 - 1/8 (0.072 mi.)	C16	20
NEW APARTMENT BUILDI	1939 W LAKE ST	E 0 - 1/8 (0.077 mi.)	D19	21
LENN GARDON	2046 W LAKE ST	W 0 - 1/8 (0.094 mi.)	F24	22
KILTER CARTAGE COMPA	1915 W LAKE ST	E 0 - 1/8 (0.097 mi.)	G26	23
VACANT PROPERTY	2034 W WALNUT ST	NW 0 - 1/8 (0.102 mi.)	H27	23
ENTERPRISE BRASS FOU	2038 W WALNUT ST	NW 0 - 1/8 (0.109 mi.)	H29	24
ACME CARTAGE	1901 W LAKE ST	E 0 - 1/8 (0.111 mi.)	I30	25
L & M MACHINE COMPAN	2042 W WALNUT ST	NW 0 - 1/8 (0.114 mi.)	H35	29
STEVE PARK	1959 W FULTON ST	N 0 - 1/8 (0.116 mi.)	J36	29
SANDBERG MANUFACTURI	1957 W FULTON ST	N 0 - 1/8 (0.116 mi.)	J39	31
C J KENEVAN	2110 W LAKE ST	W 0 - 1/8 (0.120 mi.)	40	31
TIM'S AUTO	1956 W FULTON ST	N 1/8 - 1/4 (0.134 mi.)	J46	37
AMERICAN OIL	1956 W FULTON ST	N 1/8 - 1/4 (0.134 mi.)	J48	41
MELLISH & MURRAY	1921 W FULTON ST	NNE 1/8 - 1/4 (0.138 mi.)	L50	42
CITY OF CHICAGO	2100 W LAKE ST	W 1/8 - 1/4 (0.141 mi.)	M52	43
CITY OF CHICAGO	2100 W LAKE ST	W 1/8 - 1/4 (0.141 mi.)	M53	43
HENRY HORNER HOMES I	1847 W LAKE ST	E 1/8 - 1/4 (0.148 mi.)	O56	49
BOREHERDT MOLT ERTRA	217 N WOLCOTT AVE	ENE 1/8 - 1/4 (0.149 mi.)	N58	52
BOREHERDT MOLT ERTRA	217 N WOLCOTT AVE	ENE 1/8 - 1/4 (0.149 mi.)	N59	52
PARKING LOT	2101 W WALNUT ST	WNW 1/8 - 1/4 (0.151 mi.)	Q63	56
TUPLE A SPRE COMPANY	2101 W WALNUT ST	WNW 1/8 - 1/4 (0.151 mi.)	Q64	56
INDUSTRIAL COUNCIL O	2053 W FULTON ST	NW 1/8 - 1/4 (0.152 mi.)	R69	62
KINZIE INDUSTRIAL DE	2053 W FULTON ST	NW 1/8 - 1/4 (0.152 mi.)	R70	63
HENRY HORNER HOMES	121 N WOLCOTT AVE	ESE 1/8 - 1/4 (0.154 mi.)	S74	67
WILLIAM WINKLER	2107 W FULTON ST	NW 1/8 - 1/4 (0.184 mi.)	T77	71
P A JOHNSON	1845 W FULTON ST	NE 1/8 - 1/4 (0.189 mi.)	U78	71
STANLEY SPRING	1850 W FULTON ST	NE 1/8 - 1/4 (0.195 mi.)	81	74
W O HOGAN	1843 W FULTON ST	NE 1/8 - 1/4 (0.197 mi.)	U82	75
W O HOGAN	1843 W FULTON ST	NE 1/8 - 1/4 (0.197 mi.)	U83	75

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
G & G REAL ESTATE PA	1948 W CARROLL AVE	N 1/8 - 1/4 (0.197 mi.)	X84	76
WESTERN RUST PROOF C	2131 W WALNUT ST	WNW 1/8 - 1/4 (0.198 mi.)	Y86	78
Not reported	2119 W FULTON ST	WNW 1/8 - 1/4 (0.200 mi.)	T88	79
VILOS MOGES	2000 W CARROLL AVE	N 1/8 - 1/4 (0.200 mi.)	89	80
M. J. SIEVERT CARTAG	2014 W CARROLL AVE	NNW 1/8 - 1/4 (0.201 mi.)	AA91	82
M. J. SIEVERT CARTAG	2014 W CARROLL AVE	NNW 1/8 - 1/4 (0.201 mi.)	AA92	82
M. J. SIEVERT CARTAG	2014 W CARROLL AVE	NNW 1/8 - 1/4 (0.201 mi.)	AA93	83
1901 W CARROLL LLC	1901 W CARROLL AVE	NNE 1/8 - 1/4 (0.205 mi.)	AB97	89
THE HERST ALLEN COMP	1901 W CARROLL AVE	NNE 1/8 - 1/4 (0.205 mi.)	AB98	89
WINKLER MOTOR SERVIC	2110 W FULTON ST	NW 1/8 - 1/4 (0.205 mi.)	T101	91
LAKE STREET LANDSCAP	1810 W LAKE ST	E 1/8 - 1/4 (0.205 mi.)	AD102	91
APEX SHYTIGHT COMPAN	1810 W LAKE ST	E 1/8 - 1/4 (0.205 mi.)	AD103	91
ROWIN CORPORATION	2108 W FULTON ST	NW 1/8 - 1/4 (0.205 mi.)	V105	94
WILLIAM FRITT	2132 W WALNUT ST	WNW 1/8 - 1/4 (0.207 mi.)	Y106	94
WILLIAM KRITT	2121 W FULTON ST	NW 1/8 - 1/4 (0.208 mi.)	T108	95
VACANT RENTAL SPACE	2026 W CARROLL AVE	NNW 1/8 - 1/4 (0.209 mi.)	AA110	99
UNKNOWN	2026 W CARROLL AVE	NNW 1/8 - 1/4 (0.209 mi.)	AA111	99
FULTON-CARROLL INDUS	2030 W CARROLL AVE	NNW 1/8 - 1/4 (0.210 mi.)	W114	102
SUPERIOR PRODUCT INC	2133 W FULTON ST	WNW 1/8 - 1/4 (0.213 mi.)	116	105
GOODMAN GROUP	2040 W CARROLL AVE	NNW 1/8 - 1/4 (0.217 mi.)	W119	108
BROMANN BROTHERS	1838 W FULTON ST	NE 1/8 - 1/4 (0.219 mi.)	123	112
GUS. BARTHOLD ELECTR	1900 W CARROLL AVE	NNE 1/8 - 1/4 (0.222 mi.)	AE125	115
STANLY SPRING COMPAN	1859 W CARROLL AVE	NE 1/8 - 1/4 (0.225 mi.)	AF126	115
STANLY SPRING COMPAN	1859 W CARROLL AVE	NE 1/8 - 1/4 (0.225 mi.)	AF127	116
CASE MOODY PIE COMPA	1818 W WALNUT ST	ENE 1/8 - 1/4 (0.225 mi.)	AG128	116
CASE MOODY PIE COMPA	1818 W WALNUT ST	ENE 1/8 - 1/4 (0.225 mi.)	AG129	116
J.L. SCHEFFLER	1823 W FULTON ST	ENE 1/8 - 1/4 (0.232 mi.)	AI132	123
ARRIATO MUTUAL PLATE	1847 W CARROLL AVE	NE 1/8 - 1/4 (0.234 mi.)	AF133	124
WEST LAKE PARTNERS	2114 W CARROLL AVE	NW 1/8 - 1/4 (0.248 mi.)	AH137	127

Lower Elevation	Address	Direction / Distance	Map ID	Page
CHICAGO BOARD OF EDU	2022 W WASHINGTON ST	SSW 0 - 1/8 (0.121 mi.)	K42	33
J. H. WALLACE	2028 W WASHINGTON ST	SSW 0 - 1/8 (0.122 mi.)	K43	34
MIDWEST PAINTING & S	2040 W WASHINGTON ST	SW 1/8 - 1/4 (0.139 mi.)	51	43
STANDARD OIL	2055 W WARREN AVE	SSW 1/8 - 1/4 (0.205 mi.)	AC99	90
STANDARD OIL	2055 W WARREN AVE	SSW 1/8 - 1/4 (0.205 mi.)	AC100	90
REV WALLACE E CONKLI	48 N HOYNE AVE	SW 1/8 - 1/4 (0.208 mi.)	107	94
HENRY HORNER HOMES	1820 W WASHINGTON BL	ESE 1/8 - 1/4 (0.218 mi.)	122	111
JOHN KARTIAS	2000 W MADISON ST	S 1/8 - 1/4 (0.241 mi.)	AJ134	124
JOHN KARTIAS	2000 W MADISON ST	S 1/8 - 1/4 (0.241 mi.)	AJ135	124

State and tribal institutional control / engineering control registries

ENG CONTROLS: Sites with Engineering Controls.

A review of the ENG CONTROLS list, as provided by EDR, and dated 03/28/2018 has revealed that there are 19 ENG CONTROLS sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HENRY HORNER HOMES R	***1999 WEST LAKE STREE***	***S 0 - 1/8 (0.005 mi.)***	***A1***	***8***

Illinois Epa Id: 0316275305				
1900-1948 WEST WALNU Illinois Epa Id: 0316275282	***1918 WEST WALNUT STR***	***NE 0 - 1/8 (0.113 mi.)***	***33***	***26***
MZI GROUP, INC Illinois Epa Id: 0316275372	***1937 WEST FULTON STR***	***NNE 0 - 1/8 (0.123 mi.)***	***L44***	***34***
HENRY HORNER HOMES A Illinois Epa Id: 0316275115	***1847 WEST LAKE STREE***	***E 1/8 - 1/4 (0.148 mi.)***	***O55***	***47***
MANKIND PROJECT CHIC Illinois Epa Id: 0316306473	***1900 WEST FULTON STR***	***NE 1/8 - 1/4 (0.184 mi.)***	***76***	***69***
KEHOE INVESTMENTS, L Illinois Epa Id: 0316275375	***2137 WEST WALNUT STR***	***WNW 1/8 - 1/4 (0.210 mi.)***	***Y115***	***103***
AMERICAN PLATING Illinois Epa Id: 0316246210	***1800-1858 WEST LAKE***	***E 1/8 - 1/4 (0.245 mi.)***	***136***	***125***
CAST RITE STEEL CAST Illinois Epa Id: 0316275244	***2135 WEST CARROLL AV***	***NW 1/4 - 1/2 (0.266 mi.)***	***142***	***130***
CHA-HENRY HORNER HOM Illinois Epa Id: 0316275169	***2215 WEST LAKE STREE***	***W 1/4 - 1/2 (0.268 mi.)***	***143***	***132***
AVRAM BUILDERS LLC Illinois Epa Id: 0316275371	***1745 WEST WALNUT STR***	***ENE 1/4 - 1/2 (0.292 mi.)***	***145***	***137***
2221 WEST WALNUT, LL Illinois Epa Id: 0316275351	***2221 WEST WALNUT AVE***	***W 1/4 - 1/2 (0.302 mi.)***	***147***	***141***
HENRY HORNER HOMES A Illinois Epa Id: 0316275210	***150 N HERMITAGE***	***E 1/4 - 1/2 (0.303 mi.)***	***148***	***142***
ALBANY STEEL & BRASS Illinois Epa Id: 0316325262	***1940 WEST GRAND AVEN***	***N 1/4 - 1/2 (0.415 mi.)***	***166***	***189***
MIDWEST ELECTRIC MFG Illinois Epa Id: 0316080001	***1639 W WALNUT***	***E 1/4 - 1/2 (0.424 mi.)***	***169***	***192***
STOCK YARDS PACKING Illinois Epa Id: 0316275185	***340 NORTH OAKLEY BOU***	***WNW 1/4 - 1/2 (0.427 mi.)***	***AM170***	***199***
GAYNES TESTING LABOR Illinois Epa Id: 0316275110	***1642 WEST FULTON STR***	***ENE 1/4 - 1/2 (0.440 mi.)***	***AO172***	***201***
1747 WEST GRAND CORP Illinois Epa Id: 0316246430	***1747 WEST GRAND AVEN***	***NE 1/4 - 1/2 (0.482 mi.)***	***AQ186***	***212***
ACCESSORIES PLUS Illinois Epa Id: 0316275257	***1641 WEST CARROLL AV***	***ENE 1/4 - 1/2 (0.486 mi.)***	***188***	***214***

Lower Elevation	Address	Direction / Distance	Map ID	Page
CLEARWATER FISHERIES Illinois Epa Id: 0316275190	***2300-2340 WEST LAKE***	***W 1/4 - 1/2 (0.380 mi.)***	***160***	***184***

INST CONTROL: Legal or administrative restrictions on land use and/or other activities (e.g., groundwater use restrictions) which effectively limit exposure to contamination may be employed as alternatives to removal or treatment of contamination.

A review of the INST CONTROL list, as provided by EDR, and dated 03/28/2018 has revealed that there

are 21 INST CONTROL sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HENRY HORNER HOMES R Illinois EPA Id: 0316275305	***1999 WEST LAKE STREE***	***S 0 - 1/8 (0.005 mi.)***	***A1***	***8***
1900-1948 WEST WALNU Illinois EPA Id: 0316275282	***1918 WEST WALNUT STR***	***NE 0 - 1/8 (0.113 mi.)***	***33***	***26***
MZI GROUP, INC Illinois EPA Id: 0316275372	***1937 WEST FULTON STR***	***NNE 0 - 1/8 (0.123 mi.)***	***L44***	***34***
HENRY HORNER HOMES A Illinois EPA Id: 0316275115	***1847 WEST LAKE STREE***	***E 1/8 - 1/4 (0.148 mi.)***	***O55***	***47***
MANKIND PROJECT CHIC Illinois EPA Id: 0316306473	***1900 WEST FULTON STR***	***NE 1/8 - 1/4 (0.184 mi.)***	***76***	***69***
KEHOE INVESTMENTS, L Illinois EPA Id: 0316275375	***2137 WEST WALNUT STR***	***WNW 1/8 - 1/4 (0.210 mi.)***	***Y115***	***103***
AMERICAN PLATING Illinois EPA Id: 0316246210	***1800-1858 WEST LAKE***	***E 1/8 - 1/4 (0.245 mi.)***	***136***	***125***
CAST RITE STEEL CAST Illinois EPA Id: 0316275244	***2135 WEST CARROLL AV***	***NW 1/4 - 1/2 (0.266 mi.)***	***142***	***130***
CHA-HENRY HORNER HOM Illinois EPA Id: 0316275169	***2215 WEST LAKE STREE***	***W 1/4 - 1/2 (0.268 mi.)***	***143***	***132***
AVRAM BUILDERS LLC Illinois EPA Id: 0316275371	***1745 WEST WALNUT STR***	***ENE 1/4 - 1/2 (0.292 mi.)***	***145***	***137***
2221 WEST WALNUT, LL Illinois EPA Id: 0316275351	***2221 WEST WALNUT AVE***	***W 1/4 - 1/2 (0.302 mi.)***	***147***	***141***
HENRY HORNER HOMES A Illinois EPA Id: 0316275210	***150 N HERMITAGE***	***E 1/4 - 1/2 (0.303 mi.)***	***148***	***142***
CALCO PLATING CO Illinois EPA Id: 0316240019	***414 N WOOD ST***	***NE 1/4 - 1/2 (0.378 mi.)***	***AL159***	***158***
ALBANY STEEL & BRASS Illinois EPA Id: 0316325262	***1940 WEST GRAND AVEN***	***N 1/4 - 1/2 (0.415 mi.)***	***166***	***189***
MIDWEST ELECTRIC MFG Illinois EPA Id: 0316080001	***1639 W WALNUT***	***E 1/4 - 1/2 (0.424 mi.)***	***169***	***192***
STOCK YARDS PACKING Illinois EPA Id: 0316275185	***340 NORTH OAKLEY BOU***	***WNW 1/4 - 1/2 (0.427 mi.)***	***AM170***	***199***
GAYNES TESTING LABOR Illinois EPA Id: 0316275110	***1642 WEST FULTON STR***	***ENE 1/4 - 1/2 (0.440 mi.)***	***AO172***	***201***
1747 WEST GRAND CORP Illinois EPA Id: 0316246430	***1747 WEST GRAND AVEN***	***NE 1/4 - 1/2 (0.482 mi.)***	***AQ186***	***212***
ACCESSORIES PLUS Illinois EPA Id: 0316275257	***1641 WEST CARROLL AV***	***ENE 1/4 - 1/2 (0.486 mi.)***	***188***	***214***

Lower Elevation	Address	Direction / Distance	Map ID	Page
WEST VILLAGE HOMES Illinois EPA Id: 0316286479	***2155-2159 WEST WARRE***	***SW 1/4 - 1/2 (0.310 mi.)***	***149***	***149***
CLEARWATER FISHERIES Illinois EPA Id: 0316275190	***2300-2340 WEST LAKE***	***W 1/4 - 1/2 (0.380 mi.)***	***160***	***184***

State and tribal voluntary cleanup sites

SRP: Illinois Environmental Protection Agency, Site Remediation Program Database

A review of the SRP list, as provided by EDR, and dated 03/28/2018 has revealed that there are 28 SRP sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HENRY HORNER HOMES R IL EPA Id: 0316275305	***1999 WEST LAKE STREE***	***S 0 - 1/8 (0.005 mi.)***	***A1***	***8***
1900-1948 WEST WALNU IL EPA Id: 0316275282	***1918 WEST WALNUT STR***	***NE 0 - 1/8 (0.113 mi.)***	***33***	***26***
MZI GROUP, INC IL EPA Id: 0316275372	***1937 WEST FULTON STR***	***NNE 0 - 1/8 (0.123 mi.)***	***L44***	***34***
AETNA PLATING WORKS IL EPA Id: 0316245001	***245 N WOLCOTT AVE***	***ENE 1/8 - 1/4 (0.145 mi.)***	***N54***	***44***
HENRY HORNER HOMES A IL EPA Id: 0316275115	***1847 WEST LAKE STREE***	***E 1/8 - 1/4 (0.148 mi.)***	***O55***	***47***
BROCO PARTNERSHIP IL EPA Id: 0316285040	1901-1933 WEST FULTO	NE 1/8 - 1/4 (0.149 mi.)	P60	53
INDUSTRIAL COUNCIL O IL EPA Id: 0316285164	***2053 WEST FULTON STR***	***NW 1/8 - 1/4 (0.152 mi.)***	***R67***	***59***
MANKIND PROJECT CHIC IL EPA Id: 0316306473	***1900 WEST FULTON STR***	***NE 1/8 - 1/4 (0.184 mi.)***	***76***	***69***
LAKEWOOD ENGINEERING IL EPA Id: 0316275087	***1901 W CARROLL***	***NNE 1/8 - 1/4 (0.205 mi.)***	***AB96***	***85***
KEHOE INVESTMENTS, L IL EPA Id: 0316275375	***2137 WEST WALNUT STR***	***WNW 1/8 - 1/4 (0.210 mi.)***	***Y115***	***103***
AMERICAN PLATING IL EPA Id: 0316246210	***1800-1858 WEST LAKE***	***E 1/8 - 1/4 (0.245 mi.)***	***136***	***125***
CAST RITE STEEL CAST IL EPA Id: 0316275244	***2135 WEST CARROLL AV***	***NW 1/4 - 1/2 (0.266 mi.)***	***142***	***130***
CHA-HENRY HORNER HOM IL EPA Id: 0316275169	***2215 WEST LAKE STREE***	***W 1/4 - 1/2 (0.268 mi.)***	***143***	***132***
AVRAM BUILDERS LLC IL EPA Id: 0316275371	***1745 WEST WALNUT STR***	***ENE 1/4 - 1/2 (0.292 mi.)***	***145***	***137***
2221 WEST WALNUT, LL IL EPA Id: 0316275351	***2221 WEST WALNUT AVE***	***W 1/4 - 1/2 (0.302 mi.)***	***147***	***141***
HENRY HORNER HOMES A IL EPA Id: 0316275210	***150 N HERMITAGE***	***E 1/4 - 1/2 (0.303 mi.)***	***148***	***142***
MIDWEST WRECKING COM IL EPA Id: 0316240023	***1950 WEST HUBBARD ST***	***N 1/4 - 1/2 (0.343 mi.)***	***155***	***156***
CALCO PLATING CO IL EPA Id: 0316240019	***414 N WOOD ST***	***NE 1/4 - 1/2 (0.378 mi.)***	***AL159***	***158***
ALBANY STEEL & BRASS IL EPA Id: 0316325262	***1940 WEST GRAND AVEN***	***N 1/4 - 1/2 (0.415 mi.)***	***166***	***189***
MIDWEST ELECTRIC MFG	***1639 W WALNUT***	***E 1/4 - 1/2 (0.424 mi.)***	***169***	***192***

IL EPA Id: 0316080001				
STOCK YARDS PACKING IL EPA Id: 0316275185	***340 NORTH OAKLEY BOU***	***WNW 1/4 - 1/2 (0.427 mi.)***	***AM170***	***199***
GAYNES TESTING LABOR IL EPA Id: 0316275110	***1642 WEST FULTON STR***	***ENE 1/4 - 1/2 (0.440 mi.)***	***AO172***	***201***
1747 WEST GRAND CORP IL EPA Id: 0316246430	***1747 WEST GRAND AVEN***	***NE 1/4 - 1/2 (0.482 mi.)***	***AQ186***	***212***
1751-1759 WEST GRAND IL EPA Id: 0316575075	1751-1759 WEST GRAND	NNE 1/4 - 1/2 (0.483 mi.)	AQ187	214
ACCESSORIES PLUS IL EPA Id: 0316275257	***1641 WEST CARROLL AV***	***ENE 1/4 - 1/2 (0.486 mi.)***	***188***	***214***

Lower Elevation	Address	Direction / Distance	Map ID	Page
WEST VILLAGE HOMES IL EPA Id: 0316286479	***2155-2159 WEST WARRE***	***SW 1/4 - 1/2 (0.310 mi.)***	***149***	***149***
CLEARWATER FISHERIES IL EPA Id: 0316275190	***2300-2340 WEST LAKE***	***W 1/4 - 1/2 (0.380 mi.)***	***160***	***184***
MCCRORY SENIOR APART IL EPA Id: 0316275380	1637-1659 WEST WASHI	ESE 1/4 - 1/2 (0.455 mi.)	178	207

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

RCRA NonGen / NLR: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA NonGen / NLR list, as provided by EDR, and dated 03/01/2018 has revealed that there are 9 RCRA NonGen / NLR sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BROCO PARTNERSHIP	1901-1933 W FULTON S	NE 1/8 - 1/4 (0.149 mi.)	P61	53
INDUSTRIAL COUNSIL O	***2053 W FULTON ST***	***NW 1/8 - 1/4 (0.152 mi.)***	***R65***	***56***
ADAMS MFG CO	***2034 W FULTON ST***	***NNW 1/8 - 1/4 (0.153 mi.)***	***71***	***64***
BERTHOLD GUS ELECTRI	***1948 W CARROLL AV***	***N 1/8 - 1/4 (0.201 mi.)***	***X95***	***84***
LAKEWOOD ENGINEERING	***1901 W CARROLL***	***NNE 1/8 - 1/4 (0.205 mi.)***	***AB96***	***85***
GENERAL SURFACE HARD	***2108 W FULTON***	***NW 1/8 - 1/4 (0.205 mi.)***	***V104***	***92***
AMERICAN PLATING SIT	***1820 WEST LAKE STREE***	***E 1/8 - 1/4 (0.208 mi.)***	***AD109***	***95***
KALPAKE PAUL AND KEN	***2101 W CARROL***	***NW 1/8 - 1/4 (0.226 mi.)***	***AH130***	***117***
BERQUIST PLATING CO	***1857-63 W CARROLL***	***NE 1/8 - 1/4 (0.229 mi.)***	***AF131***	***121***

EXECUTIVE SUMMARY

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR Hist Auto: EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Auto list, as provided by EDR, has revealed that there are 5 EDR Hist Auto sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
BROWN JOHN	2019 W LAKE	WSW 0 - 1/8 (0.024 mi.)	A2	11
HORN MARTIN	1923 LAKE	E 0 - 1/8 (0.076 mi.)	D17	20
VERHOEF WALTER B	1905 07 W LAKE	E 0 - 1/8 (0.085 mi.)	G21	21
AUTO CLINIC & TOWING	1915 W LAKE	E 0 - 1/8 (0.085 mi.)	G22	22
ACTIVE MOTOR GARAGE	1901 W LAKE	E 0 - 1/8 (0.085 mi.)	G23	22

EDR Hist Cleaner: EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

A review of the EDR Hist Cleaner list, as provided by EDR, has revealed that there are 3 EDR Hist Cleaner sites within approximately 0.125 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
WING NEW	1939 W LAKE	E 0 - 1/8 (0.077 mi.)	D18	21
RUSSELL AUBREY	2042 LAKE	W 0 - 1/8 (0.080 mi.)	F20	21
KEMP LOUIS J	1913 LAKE	E 0 - 1/8 (0.094 mi.)	G25	23

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 4 records.

Site Name	Database(s)
GOSS PRINTING	SEMS-ARCHIVE
UNITED LEAD CO.	SEMS-ARCHIVE
SOGO PARTNERS LLC	LUST
832 W FULTON, LLC	LUST

OVERVIEW MAP - 5350904.2S

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

0 1/4 1/2 1 Miles

- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Upgradient Area

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Damon Green Line	CLIENT:	GSG Environmental Group, LLC.
ADDRESS:	Damon Avenue & Lake Street Chicago IL 60612	CONTACT:	Ted Cagney
LAT/LONG:	41.884997 / 87.676746	INQUIRY #:	5350904.2s
		DATE:	July 02, 2018 3:45 pm

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DETAIL MAP - 5350904.2S

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Damon Green Line	CLIENT:	GSG Environmental Group, LLC.
ADDRESS:	Damon Avenue & Lake Street Chicago IL 60612	CONTACT:	Ted Cagney
LAT/LONG:	41.884997 / 87.676746	INQUIRY #:	5350904.2s
		DATE:	July 02, 2018 3:47 pm

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	1	0	NR	NR	1
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	1	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	1	1	NR	2
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		2	6	NR	NR	NR	8
RCRA-CESQG	0.250		1	2	NR	NR	NR	3
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent CERCLIS								
SSU	1.000		0	0	0	1	NR	1
State and tribal landfill and/or solid waste disposal site lists								
CCDD	0.500		0	0	0	NR	NR	0
SWF/LF	0.500		0	0	0	NR	NR	0
LF SPECIAL WASTE	0.500		0	0	0	NR	NR	0
IL NIPC	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		3	7	37	NR	NR	47

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
LUST TRUST	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		5	13	NR	NR	NR	18
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
TANKS	0.250		22	54	NR	NR	NR	76
State and tribal institutional control / engineering control registries								
ENG CONTROLS	0.500		3	4	12	NR	NR	19
INST CONTROL	0.500		3	4	14	NR	NR	21
State and tribal voluntary cleanup sites								
INDIAN VCP	0.500		0	0	0	NR	NR	0
SRP	0.500		3	8	17	NR	NR	28
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2	TP		NR	NR	NR	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
SPILLS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	9	NR	NR	NR	9

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
AIRS	TP		NR	NR	NR	NR	NR	0
ASBESTOS	TP		NR	NR	NR	NR	NR	0
BOL	TP		NR	NR	NR	NR	NR	0
CHICAGO ENV	TP		NR	NR	NR	NR	NR	0
COAL ASH	0.500		0	0	0	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HWAR	TP		NR	NR	NR	NR	NR	0
IMPDMENT	0.500		0	0	0	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PIMW	0.250		0	0	NR	NR	NR	0
TIER 2	TP		NR	NR	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		5	NR	NR	NR	NR	5
EDR Hist Cleaner	0.125		3	NR	NR	NR	NR	3
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA HWS	TP		NR	NR	NR	NR	NR	0
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	50	108	82	2	0	242

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **HENRY HORNER HOMES REDEVELOPMENT AREA C** **ENG CONTROLS** **S108968261**
South **1999 WEST LAKE STREET** **INST CONTROL** **N/A**
< 1/8 **CHICAGO, IL 60612** **SRP**
0.005 mi.
26 ft. **Site 1 of 3 in cluster A**

Relative:
Higher

Actual:
597 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275305
NFR Letter:	08/10/2010
Date NFR Recorded:	08/19/2010
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	John Gerut
RA Company:	Chicago Housing Authority
RA Address:	60 East Van Buren Street
RA City,St,Zip:	Chicago, IL 60605-1207
Worker Caution:	Yes
Acres:	2.18
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	Yes

Illinois Epa Id:	0316275305
NFR Letter:	02/15/2017
Date NFR Recorded:	05/26/2017
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Daniel Cooper
RA Company:	Chicago Park District
RA Address:	541 North Fairbanks Court
RA City,St,Zip:	Chicago, IL 60611
Worker Caution:	Yes
Acres:	1.75
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	Yes
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	Yes

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275305
NFR Letter:	08/10/2010
Date NFR Recorded:	08/19/2010

HENRY HORNER HOMES REDEVELOPMENT AREA C (Continued) **S108968261**

Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	John Gerut
RA Company:	Chicago Housing Authority
RA Address:	60 East Van Buren Street
RA City,St,Zip:	Chicago, IL 60605-1207
Worker Caution:	Yes
Acres:	2.18
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	Yes

Illinois EPA Id:	0316275305
NFR Letter:	02/15/2017
Date NFR Recorded:	05/26/2017
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Daniel Cooper
RA Company:	Chicago Park District
RA Address:	541 North Fairbanks Court
RA City,St,Zip:	Chicago, IL 60611
Worker Caution:	Yes
Acres:	1.75
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	Yes
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	Yes

SRP:

IL EPA Id:	0316275305
US EPA Id:	Not reported
Longitude:	-87.675435
Latitude:	41.883871
Contact Name:	Daniel Cooper
Contact Address:	541 North Fairbanks Court
Contact City,St,Zip:	Chicago 60611
Date Enrolled:	01/07/2008
Point Of Contact:	Felix R. Moran, P.E.
Consultant Company:	Environmental Design International, Inc.
Consultant Address:	33 West Monroe Street

HENRY HORNER HOMES REDEVELOPMENT AREA C (Continued) **S108968261**

Consultant City,St,Zip:	Chicago 60603
Proj Mgr Assigned:	James Baldwin
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Chicago Park District

NFRDL:

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	Yes
Remediation Applicant Name:	John Gerut
Remediation Applicant Company:	Chicago Housing Authority
Remediation Applicant Address:	60 East Van Buren Street
Remediation Applicant City,St,Zip:	Chicago, IL 60605-1207
Illinois EPA:	0316275305
Site Name:	Henry Horner Homes Redevelopment Area C
NFR Letter:	2010-08-10
NFR Letter Date Recorded:	2010-08-19
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	2.18

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	Yes
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	Yes
Remediation Applicant Name:	Daniel Cooper
Remediation Applicant Company:	Chicago Park District
Remediation Applicant Address:	541 North Fairbanks Court
Remediation Applicant City,St,Zip:	Chicago, IL 60611
Illinois EPA:	0316275305
Site Name:	Henry Horner Homes Redevelopment Area C
NFR Letter:	2017-02-15
NFR Letter Date Recorded:	2017-05-26
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	1.75

A2 **BROWN JOHN** **EDR Hist Auto** **1009105141**
WSW **2019 W LAKE** **N/A**
< 1/8 **CHICAGO, IL**
0.024 mi.
127 ft. **Site 2 of 3 in cluster A**

Relative: EDR Hist Auto
Higher

Actual: Year: Name: Type:
597 ft. 1928 BROWN JOHN AUTOMOBILE REPAIRING

A3 **JOHN BROWN** **TANKS** **S121838467**
WSW **2019 W LAKE ST** **N/A**
< 1/8 **CHICAGO, IL**
0.024 mi.
127 ft. **Site 3 of 3 in cluster A**

Relative: CHICAGO TANKS:
Higher

Actual:
597 ft.

Facility ID:	2019LAK1951-07-09
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	07/09/1951
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: AUTOMATIC TANK WORKS; INSTALL 1-1K GAS
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.884964
Longitude:	-87.677211

B4 **UNIVERSITY HEALTH SCIENCE** **TANKS** **S121837953**
WNW **2012 W LAKE ST** **N/A**
< 1/8 **CHICAGO, IL**
0.033 mi.
174 ft. **Site 1 of 2 in cluster B**

Relative: CHICAGO TANKS:
Higher

Actual:
597 ft.

Facility ID:	2012WLA1952-09-25
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	09/25/1952
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: COLLINS & WILSON; INSTALL 1-5K F.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.88496
Longitude:	-87.677331

B5 **UNIVERSITY HEALTH SCIENCE** **TANKS** **S121837954**
WNW **2012 W LAKE ST** **N/A**
< 1/8 **CHICAGO, IL**
0.033 mi.
174 ft. **Site 2 of 2 in cluster B**

Relative: **Higher**
Actual: **597 ft.**

CHICAGO TANKS:

Facility ID:	2012WLA1986-04-28
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	04/28/1986
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: ACTION WRECKING; REMOVE 1-5K F.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.88496
Longitude:	-87.677331

C6 **MR. GEORGE SNIEDER** **TANKS** **S121840833**
North **215 N DAMEN AVE** **N/A**
< 1/8 **CHICAGO, IL**
0.054 mi.
287 ft. **Site 1 of 4 in cluster C**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	2038911
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	GASOLINE
Tank Capacity:	1100
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	215-23 N DAMEN, ABANDONED 05/14/99, Historic data from former Dept. of Environment [Associated Permit Numbers: 104865;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.88575
Longitude:	-87.676799

D7 **J.A. BROWN** **TANKS** **S121836671**
East **1952 W LAKE ST** **N/A**
< 1/8 **CHICAGO, IL**
0.060 mi.
319 ft. **Site 1 of 5 in cluster D**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	1952WLA1958-07-16
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported

J.A. BROWN (Continued) **S121836671**

Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	07/16/1958
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: LONNIE BARRETT; INSTALL 1-275G F.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.885043
Longitude:	-87.675617

D8 **AVALOTIS PAINTING CO INC** **RCRA-SQG 1001112257**
East **1931 W LAKE ST** **FINDS ILR000022863**
< 1/8 **CHICAGO, IL 60612** **ECHO**
0.066 mi.
351 ft. **Site 2 of 5 in cluster D**

Relative: Higher

Actual: 598 ft.

RCRA-SQG:

Date form received by agency:	06/05/1996
Facility name:	AVALOTIS PAINTING CO INC
Facility address:	1931 W LAKE ST CHICAGO, IL 60612
EPA ID:	ILR000022863
Contact:	GERARD MASTERS
Contact address:	1931 W LAKE ST CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-828-9666
Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	AVALOTIS PAINTING CO INC
Owner/operator address:	1931 W LAKE ST CHICGAO, IL 60612
Owner/operator country:	Not reported
Owner/operator telephone:	312-563-1455
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No

AVALOTIS PAINTING CO INC (Continued) **1001112257**

Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 11/20/1996
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110005945086

Environmental Interest/Information System
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1001112257
Registry ID: 110005945086
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005945086

E9
NW
< 1/8
0.067 mi.
354 ft.

STANDARD EQUIPMENT CO.
2033 W WALNUT ST
CHICAGO, IL

Site 1 of 5 in cluster E

TANKS **S121839984**
N/A

Relative:
Higher

Actual:
598 ft.

CHICAGO TANKS:

Facility ID:	2033WWALNUT
Tank Type:	ABOVEGROUND STORAGE TANK
Owner:	STANDARD EQUIPMENT CO.
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	DOUBLE WALL STEEL
Substance:	DIESEL
Tank Capacity:	Not reported
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	DATE OF REPORT: 08/06/2009 INSLATTION PERMIT A00998: CONTRACTOR INSTALLED A 1000 DISPENSING DIESEL TANK.
Data Source:	HISTORIC DEPT.OF ENVIRONMENT
Latitude:	41.885867
Longitude:	-87.67771

E10
NW
< 1/8
0.067 mi.
354 ft.

STANDARD EQUIPMENT
2033 W WALNUT
CHICAGO, IL 60612

Site 2 of 5 in cluster E

UST **U003104641**
N/A

Relative:
Higher

Actual:
598 ft.

UST:

Facility ID:	2035132
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0024961
Owner Name:	Standard Equipment
Owner Address:	2033 W Walnut
Owner City,St,Zip:	Chicago, IL 99999
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	1/1/1901
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported

STANDARD EQUIPMENT (Continued) **U003104641**

Removed Date: Not reported
Abandoned Date: Not reported

E11 **STANDARD EQUIPMENT** **TANKS** **S121839982**
NW **2033 W WALNUT ST** **N/A**
< 1/8 **CHICAGO, IL**
0.067 mi.
354 ft. **Site 3 of 5 in cluster E**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:
Facility ID: 2033WAL1958-03-28
Tank Type: UNDERGROUND STORAGE TANK
Owner: Not reported
Tank ID: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Substance: Not reported
Tank Capacity: Not reported
Install Date: 03/28/1958
Removal Date: Not reported
Last Used Date: Not reported
Comments: WORK BY: GENERAL TANK; INSTALL 1-2K GAL FUEL OIL UST FINAL 12/30/58
Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.885867
Longitude: -87.67771

E12 **STANDARD EQUIPMENT** **TANKS** **S121839983**
NW **2033 W WALNUT ST** **N/A**
< 1/8 **CHICAGO, IL**
0.067 mi.
354 ft. **Site 4 of 5 in cluster E**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:
Facility ID: 2033WAL1990-01-03
Tank Type: UNDERGROUND STORAGE TANK
Owner: Not reported
Tank ID: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Substance: Not reported
Tank Capacity: Not reported
Install Date: 01/03/1990
Removal Date: Not reported
Last Used Date: Not reported
Comments: WORK BY: MAECORP INC.; REMOVE 1-2K GAL FUEL OIL TANK FINAL 7/20/92
Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.885867
Longitude: -87.67771

E13
NW
< 1/8
0.067 mi.
354 ft.

STANDARD EQUIPMENT CO
2033 W WALNUT
CHICAGO, IL 60612

Site 5 of 5 in cluster E

Relative: Higher

Actual: 598 ft.

RCRA-SQG **1000310490**
FINDS **ILD066211160**
ECHO

RCRA-SQG:

Date form received by agency:	04/01/2006
Facility name:	STANDARD EQUIPMENT CO
Facility address:	2033 W WALNUT CHICAGO, IL 60612
EPA ID:	ILD066211160
Contact:	ENV COORDINATOR
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	312-829-1919
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	STANDARD EQUIPMENT CO
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1900
Owner/Op end date:	Not reported

Owner/operator name:	STANDARD EQUIPMENT CO
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1900
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported

STANDARD EQUIPMENT CO (Continued) **1000310490**

Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: STANDARD EQUIPMENT CO
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/01/1990
Site name: STANDARD EQUIPMENT CO
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110005836131

STANDARD EQUIPMENT CO (Continued) **1000310490**

Environmental Interest/Information System

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000310490
Registry ID:	110005836131
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110005836131

C14 **KINZIE IND. DEVELOPMENT CORP.** **LUST** **S104522406**
North **2000-2034 WEST WALNUT** **N/A**
< 1/8 **CHICAGO, IL 60612**
0.072 mi.
380 ft. **Site 2 of 4 in cluster C**

Relative: **Higher**

Actual: **598 ft.**

LUST:

Incident Num:	951894
IL EPA Id:	316286327
Product:	Other Petroleum
IEMA Date:	1995-09-11
Project Manager:	Putrich
Project Manager Phone:	(217) 524-4827
Email:	Steve.Putrich@illinois.gov
PRP Name:	Kinzie Ind. Development Corp.
PRP Contact:	Ken Govas
PRP Address:	2023 West Carrol Ave.
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	1995-10-23
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

C15 **CITY OF CHICAGO** **TANKS** **S121837070**
North **2000 W WALNUT ST** **N/A**
< 1/8 **CHICAGO, IL**
0.072 mi.
380 ft. **Site 3 of 4 in cluster C**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	2000WAL1959-09-21
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	09/21/1959
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: ROBERT YOUNG INC; INSTALL 1-3K & 1-5K GAL USTS FINAL 5/2/60
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.885896
Longitude:	-87.676803

C16 **CITY OF CHICAGO** **TANKS** **S121837071**
North **2000 W WALNUT ST** **N/A**
< 1/8 **CHICAGO, IL**
0.072 mi.
380 ft. **Site 4 of 4 in cluster C**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	2000WAL1979-04-09
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	04/09/1979
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: HENEGHAN WRECKING; REMOVE 1-3K & 1-5K GAL FUEL OIL TANKS FINAL 4/30/79
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.885896
Longitude:	-87.676803

D17 **HORN MARTIN** **EDR Hist Auto** **1009118244**
East **1923 LAKE** **N/A**
< 1/8 **CHICAGO, IL**
0.076 mi.
401 ft. **Site 3 of 5 in cluster D**

Relative: **Higher**
Actual: **597 ft.**

EDR Hist Auto

Year:	Name:	Type:
1923	HORN MARTIN	AUTOMOBILE REPAIRING

D18 **WING NEW** **EDR Hist Cleaner** **1009200233**
East **1939 W LAKE** **N/A**
< 1/8 **CHICAGO, IL**
0.077 mi.
409 ft. **Site 4 of 5 in cluster D**

Relative: EDR Hist Cleaner
Higher

Actual: Year: Name: Type:
598 ft. 1928 WING NEW LAUNDRIES CHINESE

D19 **NEW APARTMENT BUILDING CONSTRUCTION** **TANKS** **S121836580**
East **1939 W LAKE ST** **N/A**
< 1/8 **CHICAGO, IL**
0.077 mi.
409 ft. **Site 5 of 5 in cluster D**

Relative: CHICAGO TANKS:
Higher

Actual:
598 ft.

Facility ID:	1939WLAKE
Tank Type:	ABOVEGROUND STORAGE TANK
Owner:	LINN MATITES INC.
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	UNKNOWN
Substance:	DIESEL
Tank Capacity:	Not reported
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	DATE OF REPORT: 09/24/2009
Data Source:	HISTORIC DEPT.OF ENVIRONMENT
Latitude:	41.885049
Longitude:	-87.675259

F20 **RUSSELL AUBREY** **EDR Hist Cleaner** **1009211172**
West **2042 LAKE** **N/A**
< 1/8 **CHICAGO, IL**
0.080 mi.
421 ft. **Site 1 of 2 in cluster F**

Relative: EDR Hist Cleaner
Higher

Actual: Year: Name: Type:
597 ft. 1923 RUSSELL AUBREY LAUNDRIES

G21 **VERHOEF WALTER B** **EDR Hist Auto** **1009103559**
East **1905 07 W LAKE** **N/A**
< 1/8 **CHICAGO, IL**
0.085 mi.
448 ft. **Site 1 of 5 in cluster G**

Relative: EDR Hist Auto
Higher

Actual: Year: Name: Type:
598 ft. 1928 VERHOEF WALTER B AUTOMOBILE REPAIRING

G22 **AUTO CLINIC & TOWING** **EDR Hist Auto** **1009074119**
East **1915 W LAKE** **N/A**
< 1/8 **CHICAGO, IL**
0.085 mi.
448 ft. **Site 2 of 5 in cluster G**

Relative: EDR Hist Auto
Higher

Actual: Year: Name: Type:
598 ft. 2001 PAULS AUTO CLINIC General Automotive Repair Shops
2002 PAULS AUTO CLINIC General Automotive Repair Shops
2003 AUTO CLINIC & TOWING AUTOMOBILE REPAIR AND SERVICE
2003 AUTO CLINIC General Automotive Repair Shops
2004 AUTO CLINIC General Automotive Repair Shops
2005 AUTO CLINIC General Automotive Repair Shops
2006 AUTO CLINIC General Automotive Repair Shops
2007 AUTO CLINIC General Automotive Repair Shops
2008 AUTO CLINIC General Automotive Repair Shops

G23 **ACTIVE MOTOR GARAGE** **EDR Hist Auto** **1009104898**
East **1901 W LAKE** **N/A**
< 1/8 **CHICAGO, IL**
0.085 mi.
448 ft. **Site 3 of 5 in cluster G**

Relative: EDR Hist Auto
Higher

Actual: Year: Name: Type:
598 ft. 1928 ACTIVE MOTOR GARAGE AUTOMOBILE GARAGES

F24 **LENN GARDON** **TANKS** **S121842946**
West **2046 W LAKE ST** **N/A**
< 1/8 **CHICAGO, IL**
0.094 mi.
497 ft. **Site 2 of 2 in cluster F**

Relative: CHICAGO TANKS:
Higher

Actual:
597 ft.

Facility ID:	2046WLA1957-10-04
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	10/04/1957
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: SINARIE CONSTRUCTION; INSTALL 1-1.5K F.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.884939
Longitude:	-87.677913

G25 **KEMP LOUIS J** **EDR Hist Cleaner** **1009214782**
East **1913 LAKE** **N/A**
< 1/8 **CHICAGO, IL**
0.094 mi.
498 ft. **Site 4 of 5 in cluster G**

Relative: EDR Hist Cleaner
Higher

Actual: Year: Name: Type:
597 ft. 1923 KEMP LOUIS J LAUNDRIES

G26 **KILTER CARTAGE COMPANY** **TANKS** **S121836476**
East **1915 W LAKE ST** **N/A**
< 1/8 **CHICAGO, IL**
0.097 mi.
511 ft. **Site 5 of 5 in cluster G**

Relative: CHICAGO TANKS:
Higher

Actual:
597 ft.

Facility ID:	1915WLA1954-08-19
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	08/19/1954
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: ROBERT YOUNG INC.; INSTALL 1-2K GAS
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.885056
Longitude:	-87.674761

H27 **VACANT PROPERTY** **TANKS** **S121841467**
NW **2034 W WALNUT ST** **N/A**
< 1/8 **CHICAGO, IL**
0.102 mi.
540 ft. **Site 1 of 5 in cluster H**

Relative: CHICAGO TANKS:
Higher

Actual:
598 ft.

Facility ID:	2041041
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	500
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	REMOVED 3/19/2002, Historic data from former Dept. of Environment [Associated Permit Numbers: 106752 106752;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.885853
Longitude:	-87.678141

H28 **VACANT PROPERTY** **UST** **U003853401**
NW **2034 W WALNUT THRID PARTY REMOVAL** **N/A**
< 1/8 **CHICAGO, IL 60612**
0.102 mi.
540 ft. **Site 2 of 5 in cluster H**

Relative: UST:
Higher

Facility ID:	2041041
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0030484
Owner Name:	Walnut Street Properties
Owner Address:	1639 W Walnut St Suite 201
Owner City,St,Zip:	Chicago, IL 60612
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	3192002
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	4/4/2002
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	3/19/2002
Abandoned Date:	Not reported

Actual:
598 ft.

H29 **ENTERPRISE BRASS FOUNDRY** **TANKS** **S121840851**
NW **2038 W WALNUT ST** **N/A**
< 1/8 **CHICAGO, IL**
0.109 mi.
575 ft. **Site 3 of 5 in cluster H**

Relative: CHICAGO TANKS:
Higher

Facility ID:	2038WAL1950-09-07
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	09/07/1950
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: MOSBECK OIL EQUIPMENT; INSTALL 1-1K GAL FUEL OIL TANK FINAL 10/25/50
Data Source:	HISTORIC DEPT. OF BUILDINGS

Actual:
598 ft.

ENTERPRISE BRASS FOUNDRY (Continued) **S121840851**

Latitude: 41.885866
Longitude: -87.677735

I30 **ACME CARTAGE** **TANKS** **S121836433**
East **1901 W LAKE ST** **N/A**
< 1/8 **CHICAGO, IL**
0.111 mi.
588 ft. **Site 1 of 3 in cluster I**

Relative: **Higher**
Actual: **597 ft.**

CHICAGO TANKS:

Facility ID:	1901WLA1957-03-06
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	03/06/1957
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: KEZ CONSTRUCTION; INSTALL 1-2K GAS, REMOVE 1-2K
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.885059
Longitude:	-87.674577

I31 **1901 W LAKE ST, LLC** **LUST** **S118194011**
East **1901 WEST LAKE STREET** **N/A**
< 1/8 **CHICAGO, IL 60612**
0.111 mi.
588 ft. **Site 2 of 3 in cluster I**

Relative: **Higher**
Actual: **597 ft.**

LUST:

Incident Num:	20150677
IL EPA Id:	316275374
Product:	Gasoline
IEMA Date:	2015-06-23
Project Manager:	Heaton
Project Manager Phone:	(217) 524-3312
Email:	Mike.Heaton@illinois.gov
PRP Name:	1901 West Lake St, LLC
PRP Contact:	Mitch Goltz
PRP Address:	2211 North Elston, Suite 304
PRP City,St,Zip:	Chicago, IL 60614
PRP Phone:	7733048600
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2015-07-08
45 Report Received:	2015-07-20
NFA/NFR Letter:	**2015-08-14**
NFR Date Recorded:	2015-09-11

I32 **COMMERCIAL BUILDING** **UST** **U004228801**
East **1901 WEST LAKE STREET** **N/A**
< 1/8 **CHICAGO, IL 60612**
0.111 mi.
588 ft. **Site 3 of 3 in cluster I**

Relative: **Higher**

Actual: **597 ft.**

UST:

Facility ID:	2045887
Facility Status:	EXEMPT
Facility Type:	**COMMERCIAL / RETAIL**
Owner Id:	U0037792
Owner Name:	1901 W. Lake Street, LLC
Owner Address:	225 W. Hubbard, Suite 600
Owner City,St,Zip:	Chicago, IL 60654
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	7/6/2015
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	15-0677
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	6/23/2015
Abandoned Date:	Not reported

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33 **1900-1948 WEST WALNUT, LLC** **ENG CONTROLS** **S108650024**
NE **1918 WEST WALNUT STREET** **INST CONTROL** **N/A**
< 1/8 **CHICAGO, IL 60612** **SRP**
0.113 mi.
595 ft.

Relative: **Higher**

Actual: **598 ft.**

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275282
NFR Letter:	09/29/2008
Date NFR Recorded:	10/22/2008
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Seth Martin
RA Company:	1900-1948 West Walnut, LLC
RA Address:	1313 West Randolph Street
RA City,St,Zip:	Chicago, IL 60607
Worker Caution:	Yes
Acres:	1.56
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes

1900-1948 WEST WALNUT, LLC (Continued) **S108650024**

Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275282
NFR Letter:	09/29/2008
Date NFR Recorded:	10/22/2008
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Seth Martin
RA Company:	1900-1948 West Walnut, LLC
RA Address:	1313 West Randolph Street
RA City,St,Zip:	Chicago, IL 60607
Worker Caution:	Yes
Acres:	1.56
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316275282
US EPA Id:	Not reported
Longitude:	-87.675431
Latitude:	41.886133
Contact Name:	Seth Martin
Contact Address:	1313 West Randolph Street
Contact City,St,Zip:	Chicago 60607
Date Enrolled:	06/04/2007
Point Of Contact:	Austin List
Consultant Company:	Environmental Protection Industries
Consultant Address:	16650 South Canal Street
Consultant City,St,Zip:	South Holland 60473
Proj Mgr Assigned:	Tim Zook
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	1900-1948 West Walnut, LLC

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No

1900-1948 WEST WALNUT, LLC (Continued) **S108650024**

Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Seth Martin
Remediation Applicant Company:	1900-1948 West Walnut, LLC
Remediation Applicant Address:	1313 West Randolph Street
Remediation Applicant City,St,Zip:	Chicago, IL 60607
Illinois EPA:	0316275282
Site Name:	1900-1948 West Walnut, LLC
NFR Letter:	2008-09-29
NFR Letter Date Recorded:	2008-10-22
Comprehensive/Focused:	Focused
Worker Caution:	Y
Acres:	1.56

H34 **LUCKY PENNY METAL PROCESSING** **UST** **U003667810**
NW **2042 W WALNUT ST** **BOL** **N/A**
< 1/8 **CHICAGO, IL 60612**
0.114 mi.
601 ft. **Site 4 of 5 in cluster H**

Relative: **Higher**
Actual: **598 ft.**

UST:

Facility ID:	2036625
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0026807
Owner Name:	Lucky Penny Llc
Owner Address:	990 Lake Shore Drive Unit 8D
Owner City,St,Zip:	Chicago, IL 60611
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	1500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	1/1/1902
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported

LUCKY PENNY METAL PROCESSING (Continued) **U003667810**

Last Passing Date: Not reported
Test Expire Date: Not reported
Removed Date: Not reported
Abandoned Date: Not reported

BOL:
Site Id: 170000518278
Inv Num: 0316286372
Interest Name: Lucky Penny Metal Processing
Interest Type: BOL
Media Code: LAND

H35 **L & M MACHINE COMPANY** **TANKS** **S121842159**
NW **2042 W WALNUT ST** **N/A**
< 1/8 **CHICAGO, IL**
0.114 mi.
601 ft. **Site 5 of 5 in cluster H**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:
Facility ID: 2042WAL1954-06-22
Tank Type: UNDERGROUND STORAGE TANK
Owner: Not reported
Tank ID: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Substance: Not reported
Tank Capacity: Not reported
Install Date: 06/22/1954
Removal Date: Not reported
Last Used Date: Not reported
Comments: WORK BY: H W EDNNON; INSTALL 1-1K GAL FUEL OIL TANK FINAL 12/17/54
Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.885861
Longitude: -87.677883

J36 **STEVE PARK** **TANKS** **S121839287**
North **1959 W FULTON ST** **N/A**
< 1/8 **CHICAGO, IL**
0.116 mi.
614 ft. **Site 1 of 7 in cluster J**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:
Facility ID: 2027292
Tank Type: UNDERGROUND STORAGE TANK
Owner: See Environmental Permit Dataset
Tank ID: 1
Tank Material: Not reported
Tank Construction: Not reported
Substance: HEATING OI
Tank Capacity: 6500
Install Date: Not reported
Removal Date: Not reported
Last Used Date: Not reported
Comments: REMOVED 12/23/99, Historic data from former Dept. of Environment [Associated Permit Numbers: 105050;]
Data Source: DEPT. OF PUBLIC HEALTH

STEVE PARK (Continued) **S121839287**

Latitude: 41.886798
Longitude: -87.675745

J37 **PARK, STEVE** **LUST** **S104530355**
North **1959 WEST FULTON STREET** **N/A**
< 1/8 **CHICAGO, IL 60612**
0.116 mi.
614 ft. **Site 2 of 7 in cluster J**

Relative: LUST:
Higher

Actual:
599 ft.

Incident Num:	20000079
IL EPA Id:	316275181
Product:	Other Petroleum
IEMA Date:	2000-01-14
Project Manager:	Zuehlke
Project Manager Phone:	(217) 557-6937
Email:	Wayne.Zuehlke@illinois.gov
PRP Name:	Steve Park
PRP Contact:	Not reported
PRP Address:	1959 West Fulton Street
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	3126661136
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2000-02-14
45 Report Received:	2003-05-12
NFA/NFR Letter:	**2003-06-12**
NFR Date Recorded:	2003-07-15

J38 **STEVE PARK** **UST** **U003715103**
North **1959 W FULTON** **N/A**
< 1/8 **CHICAGO, IL 60612**
0.116 mi.
614 ft. **Site 3 of 7 in cluster J**

Relative: UST:
Higher

Actual:
599 ft.

Facility ID:	2039248
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0028998
Owner Name:	Steve Park
Owner Address:	1959 W Fulton
Owner City,St,Zip:	Chicago, IL 60612
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	6000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**

STEVE PARK (Continued) **U003715103**

Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	8/6/1999
Abandoned Date:	Not reported

J39 **SANDBERG MANUFACTURING** **TANKS** **S121836696**
North **1957 W FULTON ST** **N/A**
< 1/8 **CHICAGO, IL**
0.116 mi.
615 ft. **Site 4 of 7 in cluster J**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	195759W1950-08-11
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	08/11/1950
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: HOOD CONSTRUCTION; INSTALL 1-6K FUEL OIL, FINAL 12/5/50
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886798
Longitude:	-87.675763

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40 **C J KENEVAN** **TANKS** **S121843179**
West **2110 W LAKE ST** **N/A**
< 1/8 **CHICAGO, IL**
0.120 mi.
631 ft.

Relative: **Higher**
Actual: **597 ft.**

CHICAGO TANKS:

Facility ID:	2110WLA1954-12-07
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	12/07/1954
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: OWNER; INSTALL 1-2.5K F.O.

C J KENEVAN (Continued) **S121843179**

Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.884878
Longitude: -87.679669

K41 **SUDLER HENRY SCHOOL** **RCRA-CESQG** **1004696985**
SSW **2022 W WASHINGTON BLVD** **ILR000061291**
< 1/8 **CHICAGO, IL 60612**
0.121 mi.
639 ft. **Site 1 of 3 in cluster K**

Relative:
Lower

Actual:
596 ft.

RCRA-CESQG:
Date form received by agency: 02/08/1999
Facility name: SUDLER HENRY SCHOOL
Facility address: 2022 W WASHINGTON BLVD
CHICAGO, IL 60612
EPA ID: ILR000061291
Mailing address: 8501 W 191ST ST BOX 10
MOKENA, IL 60448
Contact: THOMAS CONNELLY
Contact address: 8501 W 191ST ST BOX 10
MOKENA, IL 60448
Contact country: US
Contact telephone: 708-923-0202
Contact email: Not reported
EPA Region: 05
Classification: Conditionally Exempt Small Quantity Generator
Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:
Owner/operator name: CHGO PUBLIC SCHOOLS 6WN
Owner/operator address: 1819 W PERSHING RD
CHICAGO, IL 60609
Owner/operator country: Not reported
Owner/operator telephone: 773-535-7038
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: District
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No

SUDLER HENRY SCHOOL (Continued) **1004696985**

Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

Violation Status: No violations found

K42 **CHICAGO BOARD OF EDUCATION** **TANKS** **S121838965**
SSW **2022 W WASHINGTON ST** **N/A**
< 1/8 **CHICAGO, IL**
0.121 mi.
639 ft. **Site 2 of 3 in cluster K**

Relative: **Lower**
Actual: **596 ft.**

CHICAGO TANKS:

Facility ID:	2022WAS1958-06-02
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	06/02/1958
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: ALEX GAUMIE; INSTALL/ENCL 1-7500 GAL FUEL OIL TANK FINAL 5/13/59
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	Not reported
Longitude:	Not reported

K43 **J. H. WALLACE** **TANKS** **S121839366**
SSW **2028 W WASHINGTON ST** **N/A**
< 1/8 **CHICAGO, IL**
0.122 mi.
645 ft. **Site 3 of 3 in cluster K**

Relative: **Lower**
Actual: **596 ft.**

CHICAGO TANKS:

Facility ID:	2028WAS1952-07-07
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	07/07/1952
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: GENERAL TANK; INSTALL 1-1K GAL FUEL OIL TANK FINAL 1/28/53
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	Not reported
Longitude:	Not reported

L44 **MZI GROUP, INC** **ENG CONTROLS** **S118096538**
NNE **1937 WEST FULTON STREET** **INST CONTROL** **N/A**
< 1/8 **CHICAGO, IL 60612** **SRP**
0.123 mi. **BOL**
650 ft. **Site 1 of 3 in cluster L**

Relative: **Higher**
Actual: **599 ft.**

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275372
NFR Letter:	09/29/2017
Date NFR Recorded:	Not reported
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Arthur Miller
RA Company:	MZI Group, Inc.
RA Address:	1937 West Fulton Street
RA City,St,Zip:	Chicago, IL 60612
Worker Caution:	Yes
Acres:	0.1
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275372
NFR Letter:	09/29/2017
Date NFR Recorded:	Not reported
Comprehensive / Focused:	Focused

MZI GROUP, INC (Continued) **S118096538**

Remediation Applicant Name:	Arthur Miller
RA Company:	MZI Group, Inc.
RA Address:	1937 West Fulton Street
RA City,St,Zip:	Chicago, IL 60612
Worker Caution:	Yes
Acres:	0.1
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316275372
US EPA Id:	Not reported
Longitude:	-87.675766
Latitude:	41.886585
Contact Name:	Arthur Miller
Contact Address:	1937 West Fulton Street
Contact City,St,Zip:	Chicago 60612
Date Enrolled:	05/21/2015
Point Of Contact:	Stephen Heuer
Consultant Company:	ETS Environmental & Associates
Consultant Address:	204 Dearborn Court
Consultant City,St,Zip:	Geneva 60134
Proj Mgr Assigned:	Rhett Rossi
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	MZI Group, Inc.

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Arthur Miller
Remediation Applicant Company:	MZI Group, Inc.
Remediation Applicant Address:	1937 West Fulton Street
Remediation Applicant City,St,Zip:	Chicago, IL 60612

MZI GROUP, INC (Continued) **S118096538**

Illinois EPA: 0316275372
Site Name: MZI Group, Inc
NFR Letter: 2017-09-29
NFR Letter Date Recorded: Not reported
Comprehensive/Focused: Focused
Worker Caution: Y
Acres: 0.1

BOL:
Site Id: 170002102249
Inv Num: 0316275372
Interest Name: MZI Group Inc
Interest Type: BOL
Media Code: LAND

45
NNW
1/8-1/4
0.128 mi.
674 ft.

FULTON CARROLL CTR **UST** **U001142696**
2021 W FULTON ST **N/A**
CHICAGO, IL 60612

Relative:
Higher

Actual:
599 ft.

UST:
Facility ID: 2030751
Facility Status: EXEMPT
Facility Type: **NONE**
Owner Id: U0020174
Owner Name: Kinzie Ind Development Corp
Owner Address: 2023 W Carroll Ave
Owner City,St,Zip: Chicago, IL 60612

Tank Number: 1
Tank Status: **Exempt from registration**
Tank Capacity: 0
Tank Substance: Heating Oil
Last Used Date: 12/1/1969
OSFM First Notify Date: 7/1/1992
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Fee Due: Not reported
Motor Fuel Permit Inspection Date: Not reported
Motor Fuel Permit Expiration Date: Not reported
MOTOR FUEL TYPE: Not reported
Pending Nov: N
IEMA: Not reported
Equipment Type: Not reported
Equipment: Not reported
Last Passing Date: Not reported
Test Expire Date: Not reported
Removed Date: Not reported
Abandoned Date: Not reported

J46 **TIM'S AUTO** **TANKS** **S121841037**
North **1956 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.134 mi.
707 ft. **Site 5 of 7 in cluster J**

Relative: **Higher**

Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	2039941
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	GASOLINE
Tank Capacity:	2000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	REMOVED 04/03/00, Historic data from former Dept. of Environment [Associated Permit Numbers: 105398;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.886798
Longitude:	-87.67571

Facility ID:	2039941
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	2
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	GASOLINE
Tank Capacity:	1150
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	REMOVED 04/03/00, Historic data from former Dept. of Environment [Associated Permit Numbers: 105398;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.886798
Longitude:	-87.67571

Facility ID:	2039941
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	3
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	USED OIL
Tank Capacity:	750
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	REMOVED 04/03/00, Historic data from former Dept. of Environment [Associated Permit Numbers: 105398;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.886798
Longitude:	-87.67571

J47 **TIMS AUTO** **RCRA-SQG** **1001960507**
North **1956 W FULTON** **UST** **ILR000074286**
1/8-1/4 **CHICAGO, IL 60612** **FINDS**
0.134 mi. **ECHO**
707 ft. **Site 6 of 7 in cluster J**

Relative:
Higher

Actual:
599 ft.

RCRA-SQG:

Date form received by agency:	01/13/2000
Facility name:	TIMS AUTO
Facility address:	1956 W FULTON CHICAGO, IL 60612
EPA ID:	ILR000074286
Contact:	TIM MULLENS
Contact address:	1956 W FULTON CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-226-1717
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	TIMS AUTO
Owner/operator address:	1956 W FULTON CHICAGO, IL 60612
Owner/operator country:	Not reported
Owner/operator telephone:	312-226-1717
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D001

TIMS AUTO (Continued) **1001960507**

. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

UST:

Facility ID:	2039941
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0029649
Owner Name:	Tim's Auto
Owner Address:	1956 West Fulton Street
Owner City,St,Zip:	Chicago, IL 60612
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	1150
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	00-0587
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	4/3/2000
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Exempt from registration**
Tank Capacity:	2000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported

TIMS AUTO (Continued) **1001960507**

MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	4/3/2000
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Exempt from registration**
Tank Capacity:	750
Tank Substance:	Used Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	4/3/2000
Abandoned Date:	Not reported

FINDS:

Registry ID: 110003055078

Environmental Interest/Information System

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1001960507
Registry ID:	110003055078
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110003055078

J48 **AMERICAN OIL** **TANKS** **S121836695**
North **1956 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.134 mi.
707 ft. **Site 7 of 7 in cluster J**

Relative: CHICAGO TANKS:
Higher

Actual: Facility ID: 1956WFU1961-03-01
599 ft. Tank Type: UNDERGROUND STORAGE TANK
Owner: Not reported
Tank ID: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Substance: Not reported
Tank Capacity: Not reported
Install Date: 03/01/1961
Removal Date: Not reported
Last Used Date: Not reported
Comments: WORK BY: AMERICAN OIL; INSTALL 1-2K FUEL OIL, FINAL 7/19/61
Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.886798
Longitude: -87.67571

L49 **RECREATIONAL PRODUCTS** **UST** **U003104601**
NNE **1921 W FULTON** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.138 mi.
726 ft. **Site 2 of 3 in cluster L**

Relative: UST:
Higher

Actual: Facility ID: 2035122
599 ft. Facility Status: CLOSED
Facility Type: **NONE**
Owner Id: U0024951
Owner Name: Mellish & Murray Co
Owner Address: 1700 W Fulton
Owner City,St,Zip: Chicago, IL 99999

Tank Number: 1
Tank Status: **Removed**
Tank Capacity: 8000
Tank Substance: Heating Oil
Last Used Date: Not reported
OSFM First Notify Date: 1/1/1901
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Fee Due: Not reported
Motor Fuel Permit Inspection Date: Not reported
Motor Fuel Permit Expiration Date: Not reported
MOTOR FUEL TYPE: Not reported
Pending Nov: N
IEMA: Not reported
Equipment Type: Not reported
Equipment: Not reported
Last Passing Date: Not reported
Test Expire Date: Not reported
Removed Date: 3/2/1993

RECREATIONAL PRODUCTS (Continued) **U003104601**

Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	8000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	1/1/1901
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	3/2/1993
Abandoned Date:	Not reported

L50 **MELLISH & MURRAY** **TANKS** **S121836501**
NNE **1921 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.138 mi.
726 ft. **Site 3 of 3 in cluster L**

Relative: **Higher**

Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	1921WFU1992-08-31
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	08/31/1992
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: ROBINEETE PETIO; INSPECT REMOVE 2-8K TANKS
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.8868
Longitude:	-87.675071

51
SW
1/8-1/4
0.139 mi.
734 ft.

MIDWEST PAINTING & SERVICE
2040 W WASHINGTON ST
CHICAGO, IL

TANKS **S121841425**
N/A

Relative:
Lower

Actual:
596 ft.

CHICAGO TANKS:

Facility ID:	2040WAS1953-03-25
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	03/25/1953
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: HOOD CONSTRUCTION; INSTALL 1-1500 GAL FUEL OIL TANK FINAL 6/12/53
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	Not reported
Longitude:	Not reported

M52
West
1/8-1/4
0.141 mi.
747 ft.

CITY OF CHICAGO
2100 W LAKE ST
CHICAGO, IL

Site 1 of 3 in cluster M

TANKS **S121843107**
N/A

Relative:
Higher

Actual:
597 ft.

CHICAGO TANKS:

Facility ID:	2100WLA1954-05-05
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	05/05/1954
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: WATER TUBE BOILER & TANK; INSTALL 1-2.7K F.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.884896
Longitude:	-87.679163

M53
West
1/8-1/4
0.141 mi.
747 ft.

CITY OF CHICAGO
2100 W LAKE ST
CHICAGO, IL

Site 2 of 3 in cluster M

TANKS **S121843108**
N/A

Relative:
Higher

Actual:
597 ft.

CHICAGO TANKS:

Facility ID:	2100WLA1980-03-18
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported

CITY OF CHICAGO (Continued) **S121843108**

Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	03/18/1980
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: EMERGENCY DEMOLITION; REMOVE 1-2.7K F.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.884896
Longitude:	-87.679163

N54 **AETNA PLATING WORKS INC** **RCRA-SQG** **1000306875**
ENE **245 N WOLCOTT AVE** **SRP** **ILD005140512**
1/8-1/4 **CHICAGO, IL 60612** **FINDS**
0.145 mi. **ECHO**
763 ft. **Site 1 of 3 in cluster N** **AIRS**
BOL

Relative:
Higher

Actual:
598 ft.

RCRA-SQG:

Date form received by agency:	07/25/1980
Facility name:	AETNA PLATING WORKS INC
Facility address:	245 N WOLCOTT AVE CHICAGO, IL 60612
EPA ID:	ILD005140512
Contact:	ROBERT MEYER
Contact address:	245 N WOLCOTT AVE CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-738-0660
Contact email:	Not reported
EPA Region:	05
Land type:	Facility is not located on Indian land. Additional information is not known.
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998

AETNA PLATING WORKS INC (Continued) **1000306875**

Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 02/19/1993
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

SRP:
IL EPA Id: 0316245001
US EPA Id: ILD005140512
Longitude: -87.674125
Latitude: 41.886583
Contact Name: Douglas Ciserella
Contact Address: 6531 South Garfield Avenue
Contact City,St,Zip: Burr Ridge 60527
Date Enrolled: 09/12/2001
Point Of Contact: Megan Paske-Wells
Consultant Company: Pioneer Environmental, Inc.
Consultant Address: 700 North Sacramento Avenue
Consultant City,St,Zip: Chicago 60612
Proj Mgr Assigned: Jennifer Seul
Sec. 4 Letter Date: Not reported
Active: No
Remediation Applicant Co: 1857 West Fulton, LLC

FINDS:

AETNA PLATING WORKS INC (Continued) **1000306875**

Registry ID: 110001342967

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

AIR MINOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000306875
Registry ID:	110001342967
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110001342967

AIRS:

2nd Address:	Not reported
Facility ID:	3159
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600DAF
Cease Operation Date:	5/26/1995
SIC Code:	3471
NAICS:	Not reported
Type Code:	LOC

AETNA PLATING WORKS INC (Continued) **1000306875**

Latitude: Not reported
Longitude: Not reported

BOL:
Site Id: 170000047857
Inv Num: 0316245001
Interest Name: Aetna Plating Works Inc
Interest Type: BOL
Media Code: LAND

O55 **HENRY HORNER HOMES AREA B** **LUST** **S104521784**
East **1847 WEST LAKE STREET** **ENG CONTROLS** **N/A**
1/8-1/4 **CHICAGO, IL 60612** **INST CONTROL**
0.148 mi. **SRP**
783 ft. **Site 1 of 3 in cluster O**

Relative: Higher
Actual: 598 ft.

LUST:
Incident Num: 962085
IL EPA Id: 316275115
Product: Other Petroleum
IEMA Date: 1996-11-07
Project Manager: Harlow
Project Manager Phone: Not reported
Email: Not reported
PRP Name: Chicago Housing Authority
PRP Contact: Margaret D. Garner
PRP Address: 833 West 115th St.
PRP City,St,Zip: Chicago, IL 60643
PRP Phone: Not reported
Site Classification: Not reported
Section 57.5(g) Letter: 732
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 1996-12-09
45 Report Received: 1997-02-18
NFA/NFR Letter: 1998-04-03
NFR Date Recorded: 1999-05-10

ENGINEERING CONTROLS:
Illinois Epa Id: 0316275115
NFR Letter: 11/14/2008
Date NFR Recorded: 12/05/2008
Comprehensive / Focused: Comprehensive
Remediation Applicant Name: John Gerut
RA Company: Chicago Housing Authority
RA Address: 60 East Van Buren Street
RA City,St,Zip: Chicago, IL 60605
Worker Caution: Yes
Acres: 7.3
Land Use: Residential or Industrial/Commercial
Ground Water Use Restriction: No
Highway Authority Agreement: No
Ordinance: Yes
Industrial - Commercial: No
Slab on Grade: No
BCT: No
Building Slab: Yes

HENRY HORNER HOMES AREA B (Continued) **S104521784**

Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275115
NFR Letter:	11/14/2008
Date NFR Recorded:	12/05/2008
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	John Gerut
RA Company:	Chicago Housing Authority
RA Address:	60 East Van Buren Street
RA City,St,Zip:	Chicago, IL 60605
Worker Caution:	Yes
Acres:	7.3
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316275115
US EPA Id:	Not reported
Longitude:	-87.672916
Latitude:	41.884233
Contact Name:	John Gerut
Contact Address:	60 East Van Buren Street
Contact City,St,Zip:	Chicago 60605
Date Enrolled:	03/09/2006
Point Of Contact:	Lisa A. Bongiovanni, P.E.
Consultant Company:	Carnow, Conibear & Associates, Ltd.
Consultant Address:	600 West Van Buren Street
Consultant City,St,Zip:	Chicago 60607
Proj Mgr Assigned:	James Baldwin
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Chicago Housing Authority

NFRDL:

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No

HENRY HORNER HOMES AREA B (Continued) **S104521784**

BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	John Gerut
Remediation Applicant Company:	Chicago Housing Authority
Remediation Applicant Address:	60 East Van Buren Street
Remediation Applicant City,St,Zip:	Chicago, IL 60605
Illinois EPA:	0316275115
Site Name:	Henry Horner Homes Area B
NFR Letter:	2008-11-14
NFR Letter Date Recorded:	2008-12-05
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	7.3

O56 **HENRY HORNER HOMES IL2-19** **TANKS** **S121839500**
East **1847 W LAKE ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.148 mi.
783 ft. **Site 2 of 3 in cluster O**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	2030457
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	120
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	12/31/1973
Comments:	REMOVED, Historic data from former Dept. of Environment [Associated Permit Numbers: 109485 109485;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.885113
Longitude:	-87.673555

O57 **HORNER HOMES IL 2-19** **UST** **U001142192**
East **1847 W. LAKE** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.148 mi.
783 ft. **Site 3 of 3 in cluster O**

Relative: **Higher**
Actual: **598 ft.**

UST:

Facility ID:	2030457
Facility Status:	CLOSED
Facility Type:	**CITY / TOWN**
Owner Id:	U0002876
Owner Name:	Chicago Housing Authority

HORNER HOMES IL 2-19 (Continued) **U001142192**

Owner Address:	60 East Van Buren, 13th Floor
Owner City,St,Zip:	Chicago, IL 60605
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	20000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1982
OSFM First Notify Date:	6/26/1992
Red Tag Issue Date:	Not reported
Install Date:	1/1/1954
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	96-2085
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	11/7/1996
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Removed**
Tank Capacity:	20000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1982
OSFM First Notify Date:	6/26/1992
Red Tag Issue Date:	Not reported
Install Date:	1/1/1954
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	11/7/1996
Abandoned Date:	Not reported
Tank Number:	3
Tank Status:	**Removed**
Tank Capacity:	20000
Tank Substance:	Heating Oil

HORNER HOMES IL 2-19 (Continued) **U001142192**

Last Used Date:	1/1/1982
OSFM First Notify Date:	6/26/1992
Red Tag Issue Date:	Not reported
Install Date:	1/1/1954
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	11/7/1996
Abandoned Date:	Not reported

Tank Number:	4
Tank Status:	**Removed**
Tank Capacity:	20000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1982
OSFM First Notify Date:	6/26/1992
Red Tag Issue Date:	Not reported
Install Date:	1/1/1954
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	11/7/1996
Abandoned Date:	Not reported

Tank Number:	5
Tank Status:	**Exempt from registration**
Tank Capacity:	300
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/14/2008
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**

HORNER HOMES IL 2-19 (Continued) **U001142192**

Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/13/2007
Abandoned Date:	Not reported

N58 **BOREHERDT MOLT ERTRACT COMPANY** **TANKS** **S121829222**
ENE **217 N WOLCOTT AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.149 mi.
786 ft. **Site 2 of 3 in cluster N**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	0217WOL1948-03-03
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	03/03/1948
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: WHITE BAKING COMPANY; INSTALL 1-1K GAL FUEL OIL TANK FINAL 3/15/48
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.885559
Longitude:	-87.674302

N59 **BOREHERDT MOLT ERTRACT COMPANY** **TANKS** **S121829223**
ENE **217 N WOLCOTT AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.149 mi.
786 ft. **Site 3 of 3 in cluster N**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	0217WOL1954-05-27
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	05/27/1954
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: MCCAULEY & SONS; INSTALL 1-7500 GAL FUEL OIL TANK FINAL

BOREHERDT MOLT ERTRACT COMPANY (Continued) **S121829223**

1/10/55
Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.885559
Longitude: -87.674302

P60 **BROCO PARTNERSHIP** **SRP** **S108891241**
NE **1901-1933 WEST FULTON STREET** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.149 mi.
789 ft. **Site 1 of 2 in cluster P**

Relative:
Higher

Actual:
599 ft.

SRP:
IL EPA Id: 0316285040
US EPA Id: ILD049293947
Longitude: -87.675055
Latitude: 41.886551
Contact Name: Charles Murray
Contact Address: 10 S 245 Madison Street
Contact City,St,Zip: Burr Ridge 60527
Date Enrolled: 10/26/2007
Point Of Contact: Gary Perkowitz
Consultant Company: St. John Mittelhauser & Associates, Inc
Consultant Address: 1401 Branding Avenue
Consultant City,St,Zip: Downers Grove 60515
Proj Mgr Assigned: Jennifer Seul
Sec. 4 Letter Date: Not reported
Active: Yes
Remediation Applicant Co: Broco Partnership

P61 **BROCO PARTNERSHIP** **RCRA NonGen / NLR** **1000286542**
NE **1901-1933 W FULTON ST** **ILD049293947**
1/8-1/4 **CHICAGO, IL 60612**
0.149 mi.
789 ft. **Site 2 of 2 in cluster P**

Relative:
Higher

Actual:
599 ft.

RCRA NonGen / NLR:
Date form received by agency: 12/27/2007
Facility name: BROCO PARTNERSHIP
Facility address: 1901-1933 W FULTON ST
CHICAGO, IL 60612
EPA ID: ILD049293947
Mailing address: 465 W DOMINION DR STE 1509
WOOD DALE, IL 60191
Contact: H MURRAY
Contact address: 1901-1933 W FULTON ST
CHICAGO, IL 60612
Contact country: US
Contact telephone: 630-207-3814
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: BROCO PARTNERSHIP
Owner/operator address: 465 W DOMINION DR STE 1509

BROCO PARTNERSHIP (Continued) **1000286542**

WOOD DALE, IL 60191
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 12/15/1977
Owner/Op end date: Not reported

Owner/operator name: BROCO PARTNERSHIP
Owner/operator address: 1901-1933 W FULTON ST
CHICAGO, IL 60601
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1986
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: U103
. Waste name: DIMETHYL SULFATE

. Waste code: U228
. Waste name: ETHENE, TRICHLORO-

Historical Generators:
Date form received by agency: 11/01/2007
Site name: MELLISH AND MURRAY CO
Classification: Not a generator, verified

Date form received by agency: 09/23/1985
Site name: MELLISH AND MURRAY CO
Classification: Large Quantity Generator

BROCO PARTNERSHIP (Continued) **1000286542**

. Waste code: K006
. Waste name: WASTEWATER TREATMENT SLUDGE FROM THE PRODUCTION OF CHROME OXIDE GREEN PIGMENTS (ANHYDROUS AND HYDRATED).

. Waste code: U103
. Waste name: DIMETHYL SULFATE

. Waste code: U228
. Waste name: ETHENE, TRICHLORO-

Violation Status: No violations found

Q62 **PARKING LOT** **UST** **U004123083**
WNW **2101 W. WALNUT ST.** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.151 mi.
797 ft. **Site 1 of 3 in cluster Q**

Relative: UST:
Higher

Actual: Facility ID: 2044113
598 ft. Facility Status: EXEMPT
Facility Type: **COMMERCIAL / RETAIL**
Owner Id: U0034865
Owner Name: Estate of William Kritt
Owner Address: 2000 W. Carroll Ave., Suite 502
Owner City,St,Zip: Chicago, IL 60612

Tank Number: 1
Tank Status: **Exempt from registration**
Tank Capacity: 2000
Tank Substance: Heating Oil
Last Used Date: 12/31/1973
OSFM First Notify Date: 8/19/2008
Red Tag Issue Date: Not reported
Install Date: Not reported
Green Tag Decal: **Not reported**
Green Tag Issue Date: **Not reported**
Green Tag Expire Date: **Not reported**
Fee Due: Not reported
Motor Fuel Permit Inspection Date: Not reported
Motor Fuel Permit Expiration Date: Not reported
MOTOR FUEL TYPE: Not reported
Pending Nov: N
IEMA: Not reported
Equipment Type: Not reported
Equipment: Not reported
Last Passing Date: Not reported
Test Expire Date: Not reported
Removed Date: 7/29/2008
Abandoned Date: Not reported

Q63 **PARKING LOT** **TANKS** **S121842575**
WNW **2101 W WALNUT ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.151 mi.
797 ft. **Site 2 of 3 in cluster Q**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	2044113
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	2000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	12/31/1973
Comments:	REMOVED 7/29/2008, Historic data from former Dept. of Environment [Associated Permit Numbers: 109707 10977;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.885816
Longitude:	-87.679545

Q64 **TUPLE A SPRE COMPANY** **TANKS** **S121843137**
WNW **2101 W WALNUT ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.151 mi.
797 ft. **Site 3 of 3 in cluster Q**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	2101WAL1951-09-26
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	09/26/1951
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: WATER TUBE BOILER & TANK; INSTALL 1-2K GAL FUEL OIL TANK FINAL 10/22/51
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.885816
Longitude:	-87.679545

R65 **INDUSTRIAL COUNSIL OF NW CHICAGO** **RCRA NonGen / NLR** **1000613050**
NW **2053 W FULTON ST** **FINDS** **ILD984833186**
1/8-1/4 **CHICAGO, IL 60612** **ECHO**
0.152 mi.
805 ft. **Site 1 of 7 in cluster R**

Relative: **Higher**
Actual: **599 ft.**

RCRA NonGen / NLR:

Date form received by agency:	04/01/2006
Facility name:	INDUSTRIAL COUNSIL OF NW CHICAGO
Facility address:	2053 W FULTON ST

INDUSTRIAL COUNSIL OF NW CHICAGO (Continued) **1000613050**

CHICAGO, IL 60612
EPA ID: ILD984833186
Contact: ENV COORDINATOR
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 312-433-7655
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: INDUSTRIAL COUNSIL OF NW CHICAGO
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Owner/operator name: INDUSTRIAL COUNSIL OF NW CHICAGO
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Owner/operator name: INDUSTRIAL COUNCIL OF NW CHICAGO
Owner/operator address: 2023 W CARROL AVE
CHICAGO, IL 60612
Owner/operator country: Not reported
Owner/operator telephone: 312-421-6835
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No

INDUSTRIAL COUNSIL OF NW CHICAGO (Continued) **1000613050**

Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/23/2006
Site name: INDUSTRIAL COUNSIL OF NW CHICAGO
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D002
. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Date form received by agency: 03/01/1992
Site name: INDUSTRIAL COUNCIL OF NORTHWES
Classification: Large Quantity Generator

Date form received by agency: 08/08/1991
Site name: INDUSTRIAL COUNSIL OF NW CHICAGO
Classification: Large Quantity Generator

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

FINDS:

Registry ID: 110005895683

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport,

INDUSTRIAL COUNSIL OF NW CHICAGO (Continued) **1000613050**

and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000613050
Registry ID:	110005895683
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110005895683

R66 **KINZIE IND. DEVELOPMENT CORP.** **LUST** **S104522407**
NW **2053 WEST FULTON ST.** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.152 mi.
805 ft. **Site 2 of 7 in cluster R**

Relative: **Higher**
Actual: **599 ft.**

LUST:

Incident Num:	951893
IL EPA Id:	316286328
Product:	Gasoline, Other Petroleum
IEMA Date:	1995-09-11
Project Manager:	Putrich
Project Manager Phone:	(217) 524-4827
Email:	Steve.Putrich@illinois.gov
PRP Name:	Kinzie Ind. Development Corp.
PRP Contact:	Ken Govas
PRP Address:	2023 West Carrol Ave.
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	1995-10-23
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

R67 **INDUSTRIAL COUNCIL OF NEARWEST CHICAGO** **SRP** **S111894594**
NW **2053 WEST FULTON STREET** **SPILLS** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.152 mi.
805 ft. **Site 3 of 7 in cluster R**

Relative: **Higher**
Actual: **599 ft.**

SRP:

IL EPA Id:	0316285164
US EPA Id:	ILD984833186
Longitude:	-87.67809
Latitude:	41.88655
Contact Name:	Robert Climack
Contact Address:	320 North Damen Avenue

INDUSTRIAL COUNCIL OF NEARWEST CHICAGO (Continued) **S111894594**

Contact City,St,Zip:	Chicago 60612
Date Enrolled:	07/07/2017
Point Of Contact:	Steven Anderson
Consultant Company:	Anderson Environmental Consulting, Inc.
Consultant Address:	5120 Belmont Road
Consultant City,St,Zip:	Downers Grove 60515
Proj Mgr Assigned:	Jennifer Seul
Sec. 4 Letter Date:	Not reported
Active:	Yes
Remediation Applicant Co:	Industrial Council of Nearwest Chicago

SPILLS:

Incident ID:	19951893
Incident Date:	Not reported
Date Received:	09/11/1995
Lust Ind:	Yes
Facility Address:	2053 W FULTON ST
Facility City:	CHICAGO
PRP Name:	KINZIE INDUSTRIAL DEVELOPMENT
AC:	Not reported
Source Table:	dbo_OCIN_INCIDENTCUR

R68 **INDUST COUNCIL** **UST** **U003667782**
NW **2053 W FULTON** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.152 mi.
805 ft. **Site 4 of 7 in cluster R**

Relative: **Higher**

Actual: **599 ft.**

UST:

Facility ID:	2035156
Facility Status:	CLOSED
Facility Type:	**NONE**
Owner Id:	U0024985
Owner Name:	Indust Council
Owner Address:	2023 W Carroll
Owner City,St,Zip:	Chicago, IL 60612
Tank Number:	1
Tank Status:	**Does Not Exist**
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	8/18/1992
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	N/A
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported

INDUST COUNCIL (Continued) **U003667782**

Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	1/1/1902
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	2
Tank Status:	**Abandoned in place**
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	8/18/1992
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	10/24/1997

Tank Number:	2
Tank Status:	**Exempt from registration**

INDUST COUNCIL (Continued) **U003667782**

Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	12/31/1973
OSFM First Notify Date:	1/1/1902
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Abandoned in place**
Tank Capacity:	3000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	8/18/1992
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	10/24/1997

R69 **INDUSTRIAL COUNCIL OF NW CHICAGO** **TANKS** **S121842971**
NW **2053 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.152 mi.
805 ft. **Site 5 of 7 in cluster R**

Relative: CHICAGO TANKS:
Higher

Facility ID:	2053WFU1991-07-23
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported

Actual:
599 ft.

INDUSTRIAL COUNCIL OF NW CHICAGO (Continued) **S121842971**

Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	07/23/1991
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: MR. FRANKINS; INSPECT REMOVE 3-10K FUEL OIL
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886743
Longitude:	-87.678836

R70 **KINZIE INDUSTRIAL DEVELOPMENT CORP.** **TANKS** **S121840186**
NW **2053 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.152 mi.
805 ft. **Site 6 of 7 in cluster R**

Relative: **Higher**

Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	2035156
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	3
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	10000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	Not reported
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.886743
Longitude:	-87.678836

Facility ID:	2035156
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	10000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	Not reported
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.886743
Longitude:	-87.678836

Facility ID:	2035156
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	2
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI

KINZIE INDUSTRIAL DEVELOPMENT CORP. (Continued) **S121840186**

Tank Capacity:	10000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	Not reported
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.886743
Longitude:	-87.678836

71
NNW
1/8-1/4
0.153 mi.
808 ft.

ADAMS MFG CO
2034 W FULTON ST
CHICAGO, IL 60612

RCRA NonGen / NLR **1000303202**
FINDS **ILD005066741**
ECHO

Relative:
Higher

Actual:
599 ft.

RCRA NonGen / NLR:

Date form received by agency:	07/07/1980
Facility name:	ADAMS MFG CO
Facility address:	2034 W FULTON ST CHICAGO, IL 60612
EPA ID:	ILD005066741
Contact:	ROBERT BRESSLER
Contact address:	2034 W FULTON ST CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-666-7612
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	ADAMS MFG CO
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

ADAMS MFG CO (Continued) **1000303202**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: F018
. Waste name: Not Defined

Violation Status: No violations found

FINDS:

Registry ID: 110009366293

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000303202
Registry ID: 110009366293
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110009366293

R72 **FULTON CARROLL PROPERTIES** **LUST** **S104525890**
NW **2051 WEST FULTON AVE.** **N/A**
1/8-1/4 **CHICAGO, IL 60647**
0.153 mi.
810 ft. **Site 7 of 7 in cluster R**

Relative: **Higher**
Actual: **599 ft.**

LUST:
Incident Num: 911763
IL EPA Id: 316225056
Product: Fuel Oil
IEMA Date: 1991-06-26
Project Manager: Hale
Project Manager Phone: Not reported
Email: Not reported

FULTON CARROLL PROPERTIES (Continued) **S104525890**

PRP Name:	Fulton Carroll Properties
PRP Contact:	June Lavelle
PRP Address:	100 North Main St.
PRP City,St,Zip:	Gloucester, MA 01930
PRP Phone:	Not reported
Site Classification:	NFA
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	1998-09-03
NFA/NFR Letter:	**1999-02-22**
NFR Date Recorded:	1999-09-20

S73 **HENRY HORNER HOMES** **UST** **U004082456**
ESE **121 N. WOLCOTT STREET** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.154 mi.
815 ft. **Site 1 of 2 in cluster S**

Relative: UST:
Higher

Actual:
597 ft.

Facility ID:	2043576
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0002876
Owner Name:	Chicago Housing Authority
Owner Address:	60 East Van Buren, 13th Floor
Owner City,St,Zip:	Chicago, IL 60605
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/14/2008
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	2/2/2007
Abandoned Date:	Not reported

S74
ESE
1/8-1/4
0.154 mi.
815 ft.

HENRY HORNER HOMES
121 N WOLCOTT AVE
CHICAGO, IL

Site 2 of 2 in cluster S

TANKS **S121842390**
N/A

Relative:
Higher

Actual:
597 ft.

CHICAGO TANKS:

Facility ID:	2043576
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	500
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	12/31/1973
Comments:	REMOVED 02/02/2007, Historic data from former Dept. of Environment [Associated Permit Numbers: 109136 109136;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.883836
Longitude:	-87.674255

M75
West
1/8-1/4
0.163 mi.
860 ft.

UNIFORM GRAINING CORP
2120 W LAKE ST
CHICAGO, IL 60612

Site 3 of 3 in cluster M

RCRA-SQG **1007264239**
ILR000127357

Relative:
Higher

Actual:
597 ft.

RCRA-SQG:

Date form received by agency:	03/22/2004
Facility name:	UNIFORM GRAINING CORP
Facility address:	2120 W LAKE ST CHICAGO, IL 60612
EPA ID:	ILR000127357
Contact:	JOEL AXELROD
Contact address:	2120 W LAKE ST CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-226-3305
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	JOEL AXELROD
Owner/operator address:	2120 W LAKE ST CHICAGO, IL 60612
Owner/operator country:	US
Owner/operator telephone:	312-226-3305
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported

UNIFORM GRAINING CORP (Continued) **1007264239**

Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 03/22/2004
Owner/Op end date: Not reported

Owner/operator name: JOEL AXELROD
Owner/operator address: 2120 W LAKE ST
CHICAGO, IL 60612
Owner/operator country: US
Owner/operator telephone: 312-226-3305
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 03/22/2004
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D002
. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Violation Status: No violations found

76
NE
1/8-1/4
0.184 mi.
969 ft.

MANKIND PROJECT CHICAGO
1900 WEST FULTON STREET
CHICAGO, IL 60623

ENG CONTROLS
INST CONTROL
SRP
BOL

S117534141
N/A

Relative:
Higher

Actual:
599 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316306473
NFR Letter:	09/25/2015
Date NFR Recorded:	10/29/2015
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Daniel Goldberg
RA Company:	ManKind Project Chicago, Inc
RA Address:	1900 West Fulton Street
RA City,St,Zip:	Chicago, IL 60623
Worker Caution:	Yes
Acres:	0.198
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316306473
NFR Letter:	09/25/2015
Date NFR Recorded:	10/29/2015
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Daniel Goldberg
RA Company:	ManKind Project Chicago, Inc
RA Address:	1900 West Fulton Street
RA City,St,Zip:	Chicago, IL 60623
Worker Caution:	Yes
Acres:	0.198
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316306473

MANKIND PROJECT CHICAGO (Continued) **S117534141**

US EPA Id:	Not reported
Longitude:	-87.674589
Latitude:	41.887063
Contact Name:	Daniel Goldberg
Contact Address:	1900 West Fulton Street
Contact City,St,Zip:	Chicago 60623
Date Enrolled:	09/19/2014
Point Of Contact:	Nick Cuzzone, P.E.
Consultant Company:	EPS Environmental Services, Inc
Consultant Address:	7237 West Devon Avenue
Consultant City,St,Zip:	Chicago 60631
Proj Mgr Assigned:	Barb Landers
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	ManKind Project Chicago, Inc

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Daniel Goldberg
Remediation Applicant Company:	ManKind Project Chicago, Inc
Remediation Applicant Address:	1900 West Fulton Street
Remediation Applicant City,St,Zip:	Chicago, IL 60623
Illinois EPA:	0316306473
Site Name:	ManKind Project Chicago
NFR Letter:	2015-09-25
NFR Letter Date Recorded:	2015-10-29
Comprehensive/Focused:	Focused
Worker Caution:	Y
Acres:	0.198

BOL:

Site Id:	170002054327
Inv Num:	0316306473
Interest Name:	Mankind Project Chicago
Interest Type:	BOL
Media Code:	LAND

T77 **WILLIAM WINKLER** **TANKS** **S121843162**
NW **2107 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.184 mi.
973 ft. **Site 1 of 4 in cluster T**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	2107WFU1962-06-05
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	06/05/1962
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: OWNER; INSPECT 1-6K GASOLINE, FINAL 9/11/62
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886728
Longitude:	-87.679564

U78 **P A JOHNSON** **TANKS** **S121836259**
NE **1845 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.189 mi.
998 ft. **Site 1 of 3 in cluster U**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	1845WFU1958-10-23
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	10/23/1958
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: PR.R. STREICH; INSTALL 1-6K GASOLINE, FINAL 5/13/59
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886812
Longitude:	-87.673788

V79 **BOND CHEMICAL CO** **RCRA-SQG** **1000182797**
NW **2100 W FULTON** **FINDS** **ILD005201280**
1/8-1/4 **CHICAGO, IL 60612** **ECHO**
0.194 mi.
1022 ft. **Site 1 of 3 in cluster V**

Relative: **Higher**
Actual: **599 ft.**

RCRA-SQG:

Date form received by agency:	04/13/1984
Facility name:	BOND CHEMICAL CO
Facility address:	2100 W FULTON CHICAGO, IL 60612
EPA ID:	ILD005201280

BOND CHEMICAL CO (Continued) **1000182797**

Contact:	BILL LYMAN
Contact address:	2100 W FULTON CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-226-5535
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No

BOND CHEMICAL CO (Continued) **1000182797**

Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110005816117

Environmental Interest/Information System
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000182797
Registry ID: 110005816117
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005816117

W80 **INDUSTRIAL COUNCIL OF NW CHICAGO** **RCRA-SQG** **1001087354**
NNW **2023 W CARROLL AVE** **ILR000020867**
1/8-1/4 **CHICAGO, IL 60612**
0.194 mi.
1025 ft. **Site 1 of 8 in cluster W**

Relative:
Higher

Actual:
599 ft.

RCRA-SQG:
Date form received by agency: 04/22/1996
Facility name: INDUSTRIAL COUNCIL OF NW CHICAGO
Facility address: 2023 W CARROLL AVE
CHICAGO, IL 60612
EPA ID: ILR000020867
Contact: KENNETH GOVAS
Contact address: 2023 W CARROLL AVE
CHICAGO, IL 60612
Contact country: US
Contact telephone: 312-421-3941
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous

INDUSTRIAL COUNCIL OF NW CHICAGO (Continued) **1001087354**

waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	INDUSTRIAL COUNCIL OF NW CHICAG
Owner/operator address:	2023 W CARROLL AVE CHICAGO, IL 60612
Owner/operator country:	Not reported
Owner/operator telephone:	312-421-3941
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code:	D001
. Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Violation Status:	No violations found

81
NE
1/8-1/4
0.195 mi.
1032 ft.

STANLEY SPRING
1850 W FULTON ST
CHICAGO, IL

TANKS **S121836281**
N/A

Relative:
Higher

Actual:
599 ft.

CHICAGO TANKS:

Facility ID:	1850WFU1953-09-29
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported

STANLEY SPRING (Continued) **S121836281**

Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	09/29/1953
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: STANDARD WELDING; INSPECT 1-22K FUEL OIL, FINAL 3/4/54
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886824
Longitude:	-87.673134

U82 **W O HOGAN** **TANKS** **S121836251**
NE **1843 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.197 mi.
1038 ft. **Site 2 of 3 in cluster U**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	184353W1948-04-29
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	04/29/1948
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: WILLIAM HOGAN; INSTALL 1-2K FUEL OIL, FINAL 12/27/48
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886828
Longitude:	-87.672943

U83 **W O HOGAN** **TANKS** **S121836250**
NE **1843 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.197 mi.
1038 ft. **Site 3 of 3 in cluster U**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	184353W1948-04-23
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	04/23/1948
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: W.O. HOGAN; INSTALL 1-1K GASOLINE, FINAL 10/8/48
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886828

W O HOGAN (Continued) **S121836250**

Longitude: -87.672943

X84 **G & G REAL ESTATE PARTNERSHIP** **TANKS** **S121840728**
North **1948 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.197 mi.
1042 ft. **Site 1 of 4 in cluster X**

Relative:
Higher

Actual:
599 ft.

CHICAGO TANKS:

Facility ID:	2038607
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	GASOLINE
Tank Capacity:	6000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	12/31/1998
Comments:	1948-58 W CARROLL, REMOVED 10/19/00, Historic data from former Dept. of Environment [Associated Permit Numbers: 105842 105842;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.887703
Longitude:	-87.67557

W85 **SRAM CORP** **RCRA-CESQG** **1004693969**
NNW **2039 W CARROLL AVE** **FINDS** **ILD984856492**
1/8-1/4 **CHICAGO, IL 60612** **ECHO**
0.198 mi.
1044 ft. **Site 2 of 8 in cluster W**

Relative:
Higher

Actual:
599 ft.

RCRA-CESQG:

Date form received by agency:	03/19/1992
Facility name:	SRAM CORP
Facility address:	2039 W CARROLL AVE CHICAGO, IL 60612
EPA ID:	ILD984856492
Contact:	MATTHEW LARSON
Contact address:	2039 W CARROLL AVE CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-243-1824
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any

SRAM CORP (Continued) **1004693969**

time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	SRAM CORP
Owner/operator address:	2039 W CARROLL AVE CHICAGO, IL 60612
Owner/operator country:	Not reported
Owner/operator telephone:	312-243-1824
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

SRAM CORP (Continued) **1004693969**

Violation Status: No violations found

FINDS:

Registry ID: 110005908152

Environmental Interest/Information System
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1004693969
Registry ID:	110005908152
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110005908152

Y86 **WESTERN RUST PROOF COMPANY** **TANKS** **S121843325**
WNW **2131 W WALNUT ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.198 mi.
1045 ft. **Site 1 of 3 in cluster Y**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	2131WAL1950-02-27
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	02/27/1950
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: KITZEHMAN; INSTALL 1-275 GAL FUEL OIL TANK FINAL 10/15/52
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.885812
Longitude:	-87.680488

X87 **G&G REAL ESTATE PARTNERSHIP** **UST** **U003668523**
North **1958 WEST CARROLL AVE.** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.199 mi.
1053 ft. **Site 2 of 4 in cluster X**

Relative: UST:
Higher

Actual:
599 ft.

Facility ID:	2038607
Facility Status:	CLOSED
Facility Type:	**COMMERCIAL / RETAIL**
Owner Id:	U0028431
Owner Name:	G&G Real Estate Partnership
Owner Address:	1958 West Carroll Ave.
Owner City,St,Zip:	Chicago, IL 60612
Tank Number:	1
Tank Status:	**Removed**
Tank Capacity:	6000
Tank Substance:	Gasoline
Last Used Date:	Not reported
OSFM First Notify Date:	12/24/1998
Red Tag Issue Date:	Not reported
Install Date:	5/1/1989
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	$0.00
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	00-2006
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	10/19/2000
Abandoned Date:	Not reported

T88 **TANKS** **S121843272**
WNW **2119 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.200 mi.
1054 ft. **Site 2 of 4 in cluster T**

Relative: CHICAGO TANKS:
Higher

Actual:
598 ft.

Facility ID:	2121FUL
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	6500
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	Not reported
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.886723

(Continued) **S121843272**

Longitude: -87.679943

89
North
1/8-1/4
0.200 mi.
1055 ft.

VILOS MOGES **TANKS** **S121837025**
2000 W CARROLL AVE **N/A**
CHICAGO, IL

Relative:
Higher

Actual:
599 ft.

CHICAGO TANKS:

Facility ID:	2000CAR1958-01-29
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	01/29/1958
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: MOSBECK OIL; INSTALL 1-550 TURPENTINE,1-1K ALCOHOL FINAL 10/6/58
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.887694
Longitude:	-87.677185

Z90
East
1/8-1/4
0.201 mi.
1060 ft.

HENRY HORNER HOMES **UST** **U004068161**
1813 W. LAKE STREET **N/A**
CHICAGO, IL 60612

Site 1 of 2 in cluster Z

Relative:
Higher

Actual:
597 ft.

UST:

Facility ID:	2043524
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0002876
Owner Name:	Chicago Housing Authority
Owner Address:	60 East Van Buren, 13th Floor
Owner City,St,Zip:	Chicago, IL 60605
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	300
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/14/2008
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported

HENRY HORNER HOMES (Continued) **U004068161**

Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/18/2006
Abandoned Date:	Not reported

Tank Number:	2
Tank Status:	**Exempt from registration**
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/14/2008
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/18/2006
Abandoned Date:	Not reported

Tank Number:	3
Tank Status:	**Does Not Exist**
Tank Capacity:	0
Tank Substance:	None
Last Used Date:	Not reported
OSFM First Notify Date:	Not reported
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported

HENRY HORNER HOMES (Continued) **U004068161**

Abandoned Date: Not reported

AA91 **M. J. SIEVERT CARTAGE COMPANY** **TANKS** **S121838105**
NNW **2014 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.201 mi.
1061 ft. **Site 1 of 6 in cluster AA**

Relative: CHICAGO TANKS:
Higher
Actual: Facility ID: 2014CAR1972-11-27
599 ft. Tank Type: UNDERGROUND STORAGE TANK
Owner: Not reported
Tank ID: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Substance: Not reported
Tank Capacity: Not reported
Install Date: 11/27/1972
Removal Date: Not reported
Last Used Date: Not reported
Comments: WORK BY: KENNEY TANK; SANDFILL 1-2K GAS FINAL 1/18/73
Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.887694
Longitude: -87.677168

AA92 **M. J. SIEVERT CARTAGE COMPANY** **TANKS** **S121838103**
NNW **2014 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.201 mi.
1061 ft. **Site 2 of 6 in cluster AA**

Relative: CHICAGO TANKS:
Higher
Actual: Facility ID: 2014CAR1950-02-24
599 ft. Tank Type: UNDERGROUND STORAGE TANK
Owner: Not reported
Tank ID: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Substance: Not reported
Tank Capacity: Not reported
Install Date: 02/24/1950
Removal Date: Not reported
Last Used Date: Not reported
Comments: WORK BY: AUTOMATIC TANK WORKS; REPLACE 1-5K GAS FINAL 7/14/50
Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.887694
Longitude: -87.677168

AA93 **M. J. SIEVERT CARTAGE COMPANY** **TANKS** **S121838104**
NNW **2014 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.201 mi.
1061 ft. **Site 3 of 6 in cluster AA**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	2014CAR1968-03-27
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	03/27/1968
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: KENNEY TANK; SANDFILL 1-5K FINAL 5/10/68
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.887694
Longitude:	-87.677168

X94 **GUS BERTHOLD ELECTRIC CO.** **LUST** **S104872079**
North **1948-1958 WEST CARROLL AVE.** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.201 mi.
1062 ft. **Site 3 of 4 in cluster X**

Relative: **Higher**
Actual: **599 ft.**

LUST:

Incident Num:	20002006
IL EPA Id:	316275042
Product:	Gasoline
IEMA Date:	2000-10-20
Project Manager:	Davis
Project Manager Phone:	(217) 785-7492
Email:	Valerie.A.Davis@illinois.gov
PRP Name:	Gus Berthold Electric Co.
PRP Contact:	Chris Berthold
PRP Address:	1900 West Carroll Ave.
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	3122435767
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2001-01-18
45 Report Received:	2001-11-09
NFA/NFR Letter:	**2004-08-20**
NFR Date Recorded:	2005-02-28

X95 **BERTHOLD GUS ELECTRIC CO** **RCRA NonGen / NLR** **1004697819**
North **1948 W CARROLL AV** **FINDS** **ILR000100438**
1/8-1/4 **CHICAGO, IL 60612**
0.201 mi.
1062 ft. **Site 4 of 4 in cluster X**

Relative:
Higher

Actual:
599 ft.

RCRA NonGen / NLR:

Date form received by agency:	11/14/2000
Facility name:	BERTHOLD GUS ELECTRIC CO
Facility address:	1948 W CARROLL AV CHICAGO, IL 60612
EPA ID:	ILR000100438
Contact:	CHARLES R BERTHOLD
Contact address:	1948 W CARROLL AV CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-243-5767
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	BERTHOLD GUS ELECTRIC CO
Owner/operator address:	1948 W CARROLL AV CHICAGO, IL 60612
Owner/operator country:	Not reported
Owner/operator telephone:	312-243-5767
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	07/01/2000
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code:	D001
. Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET,

BERTHOLD GUS ELECTRIC CO (Continued) **1004697819**

WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Historical Generators:
Date form received by agency: 10/02/2000
Site name: BERTHOLD GUS ELECTRIC CO
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

FINDS:

Registry ID: 110003060133

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

AB96 **LAKEWOOD ENGINEERING & MFG CO** **LUST** **1000907625**
NNE **1901 W CARROLL** **SRP** **IL0000888677**
1/8-1/4 **CHICAGO, IL 60612** **RCRA NonGen / NLR**
0.205 mi. **FINDS**
1081 ft. **Site 1 of 3 in cluster AB** **ECHO**

Relative: Higher

Actual: 599 ft.

LUST:
Incident Num: 980115
IL EPA Id: 316275087
Product: Gasoline
IEMA Date: 1998-01-15
Project Manager: Haskins
Project Manager Phone: Not reported
Email: Not reported
PRP Name: Lakewood Eng. & Mfg.
PRP Contact: John Sharkey
PRP Address: 501 North Sacramento Blvd.
PRP City,St,Zip: Chicago, IL 60612
PRP Phone: 7737224300
Site Classification: Not reported
Section 57.5(g) Letter: 732
Date Section 57.5(g) Letter: 1998-04-09
Non LUST Determination Letter: Not reported
20 Report Received: 1998-03-05
45 Report Received: Not reported
NFA/NFR Letter: **Not reported**
NFR Date Recorded: Not reported

Incident Num: 20071299
IL EPA Id: 316275087
Product: Other Petroleum

LAKEWOOD ENGINEERING & MFG CO (Continued) **1000907625**

IEMA Date:	2007-09-26
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	1901 West Carroll LLC
PRP Contact:	Norman Glassberg
PRP Address:	1730 West Wrightwood
PRP City,St,Zip:	Chicago, IL 60614
PRP Phone:	7738711300
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2008-01-29
45 Report Received:	2011-03-22
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	942167
IL EPA Id:	316275087
Product:	Other Petroleum
IEMA Date:	1994-09-22
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Lakewood Eng. & Mfg.
PRP Contact:	John Sharkey
PRP Address:	1901 West Carroll Ave.
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	1995-05-18
Non LUST Determination Letter:	Not reported
20 Report Received:	1994-10-12
45 Report Received:	1994-11-07
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

SRP:

IL EPA Id:	0316275087
US EPA Id:	IL0000888677
Longitude:	-87.675356
Latitude:	41.887424
Contact Name:	Jesse Sharkey
Contact Address:	222 Merchandise Mart Plaza
Contact City,St,Zip:	Chicago 60654-1016
Date Enrolled:	02/10/2009
Point Of Contact:	Not reported
Consultant Company:	K-Plus Engineering, LLC
Consultant Address:	15 Spinning Wheel Road
Consultant City,St,Zip:	Hinsdale 60521
Proj Mgr Assigned:	Josh Rilying
Sec. 4 Letter Date:	Not reported
Active:	Yes
Remediation Applicant Co:	Chicago Teachers Union Foundation

LAKEWOOD ENGINEERING & MFG CO (Continued) **1000907625**

RCRA NonGen / NLR:
Date form received by agency: 04/01/2006
Facility name: LAKEWOOD ENGINEERING
Facility address: 1901 W CARROLL
CHICAGO, IL 60612
EPA ID: IL0000888677
Contact: ENV COORDINATOR
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 773-722-4300
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: LAKEWOOD ENGINEERING
Owner/operator address: 1901 W CARROLL
CHICAGO, IL 60612
Owner/operator country: Not reported
Owner/operator telephone: 312-722-4300
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: LAKEWOOD ENGINEERING
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Owner/operator name: LAKEWOOD ENGINEERING
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

LAKEWOOD ENGINEERING & MFG CO (Continued) **1000907625**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 10/17/1994
Site name: LAKEWOOD ENGINEERING
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110005805619

Environmental Interest/Information System
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000907625

LAKEWOOD ENGINEERING & MFG CO (Continued) **1000907625**

Registry ID: 110005805619
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005805619

AB97 **1901 W CARROLL LLC** **TANKS** **S121839975**
NNE **1901 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.205 mi.
1081 ft. **Site 2 of 3 in cluster AB**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	2033991
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	?
Tank Capacity:	8000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	12/31/1973
Comments:	ABANDONED, Historic data from former Dept. of Environment [Associated Permit Numbers: 109478 109478 109477;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.887466
Longitude:	-87.675965

Facility ID:	2033991
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	2
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	?
Tank Capacity:	8000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	12/31/1973
Comments:	ABANDONED, Historic data from former Dept. of Environment [Associated Permit Numbers: 109478 109478 109477;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.887466
Longitude:	-87.675965

AB98 **THE HERST ALLEN COMPANY** **TANKS** **S121836402**
NNE **1901 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.205 mi.
1081 ft. **Site 3 of 3 in cluster AB**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	1901CAR1960-09-29
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported

THE HERST ALLEN COMPANY (Continued) **S121836402**

Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	09/29/1960
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: H. M. BOLES & SONS; INSTALL 1-8K GAL GASLN FINAL 8/18/60
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.887466
Longitude:	-87.675965

AC99 **STANDARD OIL** **TANKS** **S121842985**
SSW **2055 W WARREN AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.205 mi.
1082 ft. **Site 1 of 2 in cluster AC**

Relative: **Lower**
Actual: **595 ft.**

CHICAGO TANKS:

Facility ID:	2055WAR1956-09-26
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	09/26/1956
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: OWNER; INSTALL 1-2K,1-3K GAS, 1-500G F.O., 1-500G W.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.882233
Longitude:	-87.678721

AC100 **STANDARD OIL** **TANKS** **S121842986**
SSW **2055 W WARREN AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.205 mi.
1082 ft. **Site 2 of 2 in cluster AC**

Relative: **Lower**
Actual: **595 ft.**

CHICAGO TANKS:

Facility ID:	2055WAR1968-04-11
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	04/11/1968
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: R. W. COLLINS; REMOVE 1-2K, 1-3K, 2-550 FINAL 6/3/68
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.882233
Longitude:	-87.678721

T101 **WINKLER MOTOR SERVICE** **TANKS** **S121843178**
NW **2110 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.205 mi.
1082 ft. **Site 3 of 4 in cluster T**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	2110WFU1948-09-21
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	09/21/1948
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: MOSBECK OIL EQUIPMENT; INSTALL 1-4K GASOLINE, FINAL 12/27/48
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886726
Longitude:	-87.679725

AD102 **LAKE STREET LANDSCAPE CONTRACTOR** **TANKS** **S121836038**
East **1810 W LAKE ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.205 mi.
1082 ft. **Site 1 of 3 in cluster AD**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	1810WLAK
Tank Type:	ABOVEGROUND STORAGE TANK
Owner:	LAKE STREET LANDSCAPE
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	D/W STEEL
Substance:	DIESEL
Tank Capacity:	Not reported
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	DATE OF REPORT: 05/25/2011
Data Source:	HISTORIC DEPT.OF ENVIRONMENT
Latitude:	41.885162
Longitude:	-87.672766

AD103 **APEX SHYTIGHT COMPANT** **TANKS** **S121836036**
East **1810 W LAKE ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.205 mi.
1082 ft. **Site 2 of 3 in cluster AD**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	1810LAW1952-03-27
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported

APEX SHYTIGHT COMPANT (Continued) **S121836036**

Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	03/27/1952
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: WILLY-MAC DONALD INC.; INSTALL 1-1K F.O.
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.885162
Longitude:	-87.672766

V104 **GENERAL SURFACE HARDENING INC** **RCRA NonGen / NLR** **1000213497**
NW **2108 W FULTON** **FINDS** **ILD081031379**
1/8-1/4 **CHICAGO, IL 60612** **ECHO**
0.205 mi.
1084 ft. **Site 2 of 3 in cluster V**

Relative:
Higher

Actual:
599 ft.

RCRA NonGen / NLR:

Date form received by agency:	12/15/1986
Facility name:	GENERAL SURFACE HARDENING INC
Facility address:	2108 W FULTON CHICAGO, IL 60612
EPA ID:	ILD081031379
Contact:	STAN PEEBLES
Contact address:	2108 W FULTON CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-226-5472
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	KING-PEEBLES BUILDING
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator

GENERAL SURFACE HARDENING INC (Continued) **1000213497**

Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: F011
. Waste name: SPENT CYANIDE SOLUTIONS FROM SALT BATH POT CLEANING FROM METAL HEAT TREATING OPERATIONS.

Violation Status: No violations found

FINDS:

Registry ID: 110005840386

Environmental Interest/Information System
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000213497
Registry ID: 110005840386
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005840386

V105 **ROWIN CORPORATION** **TANKS** **S121843163**
NW **2108 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.205 mi.
1084 ft. **Site 3 of 3 in cluster V**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	2108FUL1948-07-30
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	07/30/1948
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: JAMES H. MCCAULEY & SONS; INSTALL 1-5K FUEL OIL, FINAL 12/16/48
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886727
Longitude:	-87.679651

Y106 **WILLIAM FRITT** **TANKS** **S121843327**
WNW **2132 W WALNUT ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.207 mi.
1092 ft. **Site 2 of 3 in cluster Y**

Relative: **Higher**
Actual: **598 ft.**

CHICAGO TANKS:

Facility ID:	2132WAL1992-03-18
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	03/18/1992
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: R. W. COLLINS; FILL IN PLACE 2-3K GAL HTG OIL TANKS FINAL N/G
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.885814
Longitude:	-87.680019

---

107 **REV WALLACE E CONKLING RET.** **TANKS** **S121855176**
SW **48 N HOYNE AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.208 mi.
1096 ft.

Relative: **Lower**
Actual: **595 ft.**

CHICAGO TANKS:

Facility ID:	48NHOYN1949-11-04
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported

REV WALLACE E CONKLING RET. (Continued) **S121855176**

Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	11/04/1949
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: MUTUAL CONSTRUCTION; INSPECTED 1-1500F.O., FINAL 1/11/50
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.882604
Longitude:	-87.679118

T108 **WILLIAM KRITT** **TANKS** **S121843269**
NW **2121 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.208 mi.
1098 ft. **Site 4 of 4 in cluster T**

Relative: Higher
Actual: 599 ft.

CHICAGO TANKS:

Facility ID:	212125F1992-03-17
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	03/17/1992
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: R. W. COLLINS; INSPECT REMOVE 1-3K GAL OIL TANK
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.88672
Longitude:	-87.680131

AD109 **AMERICAN PLATING SITE** **SEMS** **1000996532**
East **1820 WEST LAKE STREET** **RCRA NonGen / NLR** **IL0001172642**
1/8-1/4 **CHICAGO, IL 60612**
0.208 mi.
1098 ft. **Site 3 of 3 in cluster AD**

Relative: Higher
Actual: 598 ft.

SEMS:

Site ID:	507639
EPA ID:	IL0001172642
Cong District:	7
FIPS Code:	17031
Latitude:	Not reported
Longitude:	Not reported
FF:	N
NPL:	Not on the NPL
Non NPL Status:	Referred to Removal - NFRAP

SEMS Detail:

Region:	5
Site ID:	507639
EPA ID:	IL0001172642
Site Name:	AMERICAN PLATING SITE

AMERICAN PLATING SITE (Continued) **1000996532**

NPL:	N
FF:	N
OU:	0
Action Code:	RV
Action Name:	RMVL
SEQ:	1
Start Date:	1995-10-16 00:00:00
Finish Date:	1/10/1996
Qual:	C
Current Action Lead:	EPA Perf

Region:	5
Site ID:	507639
EPA ID:	IL0001172642
Site Name:	AMERICAN PLATING SITE
NPL:	N
FF:	N
OU:	0
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	1995-11-29 00:00:00
Finish Date:	Not reported
Qual:	V
Current Action Lead:	EPA Perf

Region:	5
Site ID:	507639
EPA ID:	IL0001172642
Site Name:	AMERICAN PLATING SITE
NPL:	N
FF:	N
OU:	0
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1995-09-26 00:00:00
Finish Date:	9/26/1995
Qual:	Not reported
Current Action Lead:	EPA Perf

Region:	5
Site ID:	507639
EPA ID:	IL0001172642
Site Name:	AMERICAN PLATING SITE
NPL:	N
FF:	N
OU:	0
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	Not reported
Finish Date:	9/28/2005
Qual:	N
Current Action Lead:	St Perf

AMERICAN PLATING SITE (Continued) **1000996532**

RCRA NonGen / NLR:
Date form received by agency: 04/01/2006
Facility name: AMERICAN PLATING CO SITE
Facility address: 1820 W LAKE ST
CHICAGO, IL 60612
EPA ID: IL0001172642
Contact: ENV COORDINATOR
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 312-353-2886
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: AMERICAN PLATING CO SITE
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Owner/operator name: AMERICAN PLATING CO SITE
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Owner/operator name: PAYNE, JOHN W.
Owner/operator address: 1820 W LAKE ST
CHICAGO, IL 60612
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

AMERICAN PLATING SITE (Continued) **1000996532**

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 11/28/1995
Site name: AMERICAN PLATING CO SITE
Classification: Large Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D002
. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

AA110 **VACANT RENTAL SPACE** **TANKS** **S121839723**
NNW **2026 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.209 mi.
1105 ft. **Site 4 of 6 in cluster AA**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	2031841
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	GASOLINE
Tank Capacity:	1000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	Not reported
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.88768
Longitude:	-87.678081

AA111 **UNKNOWN** **TANKS** **S121839722**
NNW **2026 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.209 mi.
1105 ft. **Site 5 of 6 in cluster AA**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	20318411951-05-09
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	05/09/1951
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: LEO LAUERMANN; INSTALL 1-1K GAS FINAL 6/29/51
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.88768
Longitude:	-87.678081

AA112 **KRITT WILLIAM** **UST** **U001386500**
NNW **2026 W CARROLL** **N/A**
1/8-1/4 **CHICAGO, IL 60622**
0.209 mi.
1105 ft. **Site 6 of 6 in cluster AA**

Relative: **Higher**
Actual: **599 ft.**

UST:

Facility ID:	2031841
Facility Status:	EXEMPT
Facility Type:	**INDUSTRIAL / MANUFACTURING**
Owner Id:	U0021319
Owner Name:	Kritt William

KRITT WILLIAM (Continued) **U001386500**

Owner Address:	1000 N Milwaukee
Owner City,St,Zip:	Chicago, IL 60622
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	1/1/1973
OSFM First Notify Date:	3/2/1993
Red Tag Issue Date:	Not reported
Install Date:	5/8/1951
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	6/1/1993

W113 **GOODMAN THEATRE** **UST** **U001386501**
NNW **2030-40 W CARROLL** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.210 mi.
1107 ft. **Site 3 of 8 in cluster W**

Relative: UST:
Higher

Facility ID:	2031839
Facility Status:	CLOSED
Facility Type:	**INDUSTRIAL / MANUFACTURING**
Owner Id:	U0021319
Owner Name:	Kritt William
Owner Address:	1000 N Milwaukee
Owner City,St,Zip:	Chicago, IL 60622
Tank Number:	1
Tank Status:	**Abandoned in place**
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	Not reported
OSFM First Notify Date:	3/2/1993
Red Tag Issue Date:	Not reported
Install Date:	4/15/1925
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N

Actual:
599 ft.

GOODMAN THEATRE (Continued) **U001386501**

IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	4/2/1993

Tank Number:	2
Tank Status:	**Abandoned in place**
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	6/15/1969
OSFM First Notify Date:	3/2/1993
Red Tag Issue Date:	Not reported
Install Date:	4/15/1925
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	4/2/1993

Tank Number:	3
Tank Status:	**Abandoned in place**
Tank Capacity:	1000
Tank Substance:	Gasoline
Last Used Date:	6/15/1969
OSFM First Notify Date:	3/2/1993
Red Tag Issue Date:	Not reported
Install Date:	4/15/1925
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	4/2/1993

GOODMAN THEATRE (Continued) **U001386501**

Tank Number:	4
Tank Status:	**Abandoned in place**
Tank Capacity:	500
Tank Substance:	Diesel Fuel
Last Used Date:	6/15/1969
OSFM First Notify Date:	3/2/1993
Red Tag Issue Date:	Not reported
Install Date:	4/15/1930
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	4/2/1993

W114 **FULTON-CARROLL INDUSTRIES** **TANKS** **S121839643**
NNW **2030 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.210 mi.
1107 ft. **Site 4 of 8 in cluster W**

Relative: **Higher**

Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	2030CAR1951-04-18
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	04/18/1951
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: AMOCO OIL; INSTALL 1-1K TESTING OIL FINAL 6/29/51
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.887688
Longitude:	-87.677566

Y115 **KEHOE INVESTMENTS, LLC** **ENG CONTROLS** **S118420093**
WNW **2137 WEST WALNUT STREET** **INST CONTROL** **N/A**
1/8-1/4 **CHICAGO, IL 60612** **SRP**
0.210 mi. **BOL**
1110 ft. **Site 3 of 3 in cluster Y**

Relative: Higher

Actual: 598 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275375
NFR Letter:	11/09/2016
Date NFR Recorded:	12/13/2016
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Thomas Kehoe
RA Company:	Kehoe Investments, LLC
RA Address:	2555 South Leavitt Street
RA City,St,Zip:	Chicago, IL 60608
Worker Caution:	Yes
Acres:	0.75
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275375
NFR Letter:	11/09/2016
Date NFR Recorded:	12/13/2016
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Thomas Kehoe
RA Company:	Kehoe Investments, LLC
RA Address:	2555 South Leavitt Street
RA City,St,Zip:	Chicago, IL 60608
Worker Caution:	Yes
Acres:	0.75
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316275375

KEHOE INVESTMENTS, LLC (Continued) **S118420093**

US EPA Id:	Not reported
Longitude:	-87.680872
Latitude:	41.885542
Contact Name:	Thomas Kehoe
Contact Address:	2555 South Leavitt Street
Contact City,St,Zip:	Chicago 60608
Date Enrolled:	08/19/2015
Point Of Contact:	Bill Lennon
Consultant Company:	Environmental Group Services Limited
Consultant Address:	557 West Polk Street
Consultant City,St,Zip:	Chicago 60607
Proj Mgr Assigned:	James Baldwin
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Kehoe Investments, LLC

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Thomas Kehoe
Remediation Applicant Company:	Kehoe Investments, LLC
Remediation Applicant Address:	2555 South Leavitt Street
Remediation Applicant City,St,Zip:	Chicago, IL 60608
Illinois EPA:	0316275375
Site Name:	Kehoe Investments, LLC
NFR Letter:	2016-11-09
NFR Letter Date Recorded:	2016-12-13
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	0.75

BOL:

Site Id:	170002114245
Inv Num:	0316275375
Interest Name:	Kehoe Investments LLC
Interest Type:	BOL
Media Code:	LAND

116
WNW
1/8-1/4
0.213 mi.
1123 ft.

SUPERIOR PRODUCT INCORPORATED — **TANKS** — **S121843329**
2133 W FULTON ST — **N/A**
CHICAGO, IL

Relative:
Higher

Actual:
598 ft.

CHICAGO TANKS:

Facility ID:	2133FUL1947-07-18
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	07/18/1947
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: HOOD CONSTRUCTION; INSTALL 1-6K FUEL OIL, FINAL 11/25/47
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886716
Longitude:	-87.6804

Z117
East
1/8-1/4
0.213 mi.
1124 ft.

CHICAGO HOUSING AUTHORITY — **LUST** — **S108255646**
1807-1813 WEST LAKE STREET — **N/A**
CHICAGO, IL 60622

Site 2 of 2 in cluster Z

Relative:
Higher

Actual:
597 ft.

LUST:

Incident Num:	20061556
IL EPA Id:	316246378
Product:	Other Petroleum
IEMA Date:	2006-12-13
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Chicago Housing Authority
PRP Contact:	Diane Martin
PRP Address:	626 West Jackson Boulevard, 8th Floor
PRP City,St,Zip:	Chicago, IL 60651
PRP Phone:	3127428309
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2007-03-07
45 Report Received:	2008-10-29
NFA/NFR Letter:	**2008-11-14**
NFR Date Recorded:	2008-12-05

W118
NNW
1/8-1/4
0.217 mi.
1148 ft.

WILLIAM KRITT
2040 W CARROLL
CHICAGO, IL 60612

Site 5 of 8 in cluster W

UST **U003104636**
N/A

Relative:
Higher

Actual:
599 ft.

UST:

Facility ID:	2035155
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0024984
Owner Name:	William Keitt Properties
Owner Address:	1000 N. Milwalkee
Owner City,St,Zip:	Chicago, IL 60612
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	10000
Tank Substance:	Gasoline
Last Used Date:	12/1/1973
OSFM First Notify Date:	7/7/1993
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	Not reported
Tank Number:	2
Tank Status:	**Exempt from registration**
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	7/7/1993
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported

WILLIAM KRITT (Continued) **U003104636**

Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	7/12/1999

Tank Number:	3
Tank Status:	**Exempt from registration**
Tank Capacity:	10000
Tank Substance:	Heating Oil
Last Used Date:	12/1/1973
OSFM First Notify Date:	7/7/1993
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	Not reported

Tank Number:	4
Tank Status:	**Exempt from registration**
Tank Capacity:	1000
Tank Substance:	Heating Oil
Last Used Date:	1/1/1972
OSFM First Notify Date:	8/1/1999
Red Tag Issue Date:	Not reported
Install Date:	1/1/1972
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	Not reported
Abandoned Date:	7/12/1999

W119
NNW
1/8-1/4
0.217 mi.
1148 ft.

GOODMAN GROUP
2040 W CARROLL AVE
CHICAGO, IL

Site 6 of 8 in cluster W

TANKS **S121840185**
N/A

Relative:
Higher

Actual:
599 ft.

CHICAGO TANKS:

Facility ID:	2035155
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	3
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	10000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	ABANDONED 06/22/93, Historic data from former Dept. of Environment [Associated Permit Numbers: 100230;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.887683
Longitude:	-87.677882

Facility ID:	2035155
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	GASOLINE
Tank Capacity:	10000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	ABANDONED 06/22/93, Historic data from former Dept. of Environment [Associated Permit Numbers: 100230;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.887683
Longitude:	-87.677882

Facility ID:	2035155
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	4
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	1500
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	ABANDONED 07/13/99, Historic data from former Dept. of Environment [Associated Permit Numbers: 100230;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.887683
Longitude:	-87.677882

Facility ID:	2035155

GOODMAN GROUP (Continued) **S121840185**

Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	2
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	10000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	ABANDONED 06/22/93, Historic data from former Dept. of Environment [Associated Permit Numbers: 100230;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.887683
Longitude:	-87.677882

W120 **W. KRITT PROPERTIES** **LUST** **S104523939**
NNW **2040 WEST CARROLL** **N/A**
1/8-1/4 **CHICAGO, IL 60622**
0.217 mi.
1148 ft. **Site 7 of 8 in cluster W**

Relative: **Higher**
Actual: **599 ft.**

LUST:

Incident Num:	931073
IL EPA Id:	316275135
Product:	Fuel Oil
IEMA Date:	1993-04-29
Project Manager:	Friedel
Project Manager Phone:	(217) 785-5736
Email:	Melinda.Friedel@illinois.gov
PRP Name:	W. Kritt Properties
PRP Contact:	W. Kritt
PRP Address:	1000 North Milwaukee Ave.
PRP City,St,Zip:	Chicago, IL 60622
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1993-05-20
45 Report Received:	1993-11-09
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

W121 **GOODMAN THEATER SCENE SHOP** **RCRA-CESQG** **1004696314**
NNW **2040 W CARROLL B** **FINDS** **ILR000044578**
1/8-1/4 **CHICAGO, IL 60612** **ECHO**
0.217 mi.
1148 ft. **Site 8 of 8 in cluster W**

Relative: **Higher**
Actual: **599 ft.**

RCRA-CESQG:

Date form received by agency:	10/31/1997
Facility name:	GOODMAN THEATER SCENE SHOP
Facility address:	2040 W CARROLL B CHICAGO, IL 60612
EPA ID:	ILR000044578

GOODMAN THEATER SCENE SHOP (Continued) **1004696314**

Mailing address:	200 S COLUMBUS DR CHICAGO, IL 60603
Contact:	JENNIFER SMITH
Contact address:	200 S COLUMBUS DR CHICAGO, IL 60603
Contact country:	US
Contact telephone:	312-243-7295
Contact email:	Not reported
EPA Region:	05
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	THE GOODMAN THEATRE
Owner/operator address:	200 S COLUMBUS DR CHICAGO, IL 60603
Owner/operator country:	Not reported
Owner/operator telephone:	312-443-3819
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

GOODMAN THEATER SCENE SHOP (Continued) **1004696314**

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

FINDS:

Registry ID: 110005959659

Environmental Interest/Information System
ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1004696314
Registry ID: 110005959659
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005959659

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122 ESE 1/8-1/4 0.218 mi. 1149 ft. **HENRY HORNER HOMES** **TANKS** **S121842371**
1820 W WASHINGTON BLVD **N/A**
CHICAGO, IL

Relative: Lower
Actual: 596 ft.

CHICAGO TANKS:
Facility ID: 2043524
Tank Type: UNDERGROUND STORAGE TANK
Owner: See Environmental Permit Dataset
Tank ID: 1
Tank Material: Not reported
Tank Construction: Not reported
Substance: HEATING OI
Tank Capacity: 250
Install Date: Not reported
Removal Date: Not reported
Last Used Date: 12/31/1973
Comments: REMOVED 12/18/2006, Historic data from former Dept. of Environment [Associated Permit Numbers: 109081 109081;]
Data Source: DEPT. OF PUBLIC HEALTH
Latitude: 41.883225
Longitude: -87.673021

HENRY HORNER HOMES (Continued) **S121842371**

Facility ID:	2043524
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	2
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	1000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	12/31/1973
Comments:	REMOVED 12/18/2006, Historic data from former Dept. of Environment [Associated Permit Numbers: 109081;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.883225
Longitude:	-87.673021

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123 **BROMANN BROTHERS** **TANKS** **S121836221**
NE **1838 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.219 mi.
1156 ft.

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	1838WFU1947-01-02
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	01/02/1947
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: MOSBECK OIL EQUIPMENT; INSPECT 1-2K FUEL OIL, FINAL 4/29/47
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886828
Longitude:	-87.672923

AE124 **GUS BERTHOLD ELEC. CO.** **RCRA-SQG** **1000409807**
NNE **1900 W. CARROLL AVENUE** **FINDS** **ILD005140033**
1/8-1/4 **CHICAGO, IL 60612** **ECHO**
0.222 mi.
1170 ft. **Site 1 of 2 in cluster AE**

Relative: **Higher**
Actual: **599 ft.**

RCRA-SQG:

Date form received by agency:	01/27/1988
Facility name:	BERTHOLD GUS ELECTRIC CO
Facility address:	1900 W CARROLL AVE CHICAGO, IL 60612
EPA ID:	ILD005140033
Contact:	FRANK BARLETTA
Contact address:	1900 W CARROLL AVE CHICAGO, IL 60612
Contact country:	US

GUS BERTHOLD ELEC. CO. (Continued) **1000409807**

Contact telephone: 312-243-5767
Contact email: Not reported
EPA Region: 05
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: BERTHOLD GUS ELECTRIC
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING:

GUS BERTHOLD ELEC. CO. (Continued) **1000409807**

TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Violation Status: No violations found

FINDS:

Registry ID: 110001820469

Environmental Interest/Information System

AFS (Aerometric Information Retrieval System (AIRS) Facility Subsystem) replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). AIRS is the national repository for information concerning airborne pollution in the United States. AFS is used to track emissions and compliance data from industrial plants. AFS data are utilized by states to prepare State Implementation Plans to comply with regulatory programs and by EPA as an input for the estimation of total national emissions. AFS is undergoing a major redesign to support facility operating permits required under Title V of the Clean Air Act.

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

AIR MINOR

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000409807
Registry ID: 110001820469

GUS BERTHOLD ELEC. CO. (Continued) **1000409807**

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110001820469

AE125 **GUS. BARTHOLD ELECTRIC COMPANY** **TANKS** **S121836365**
NNE **1900 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.222 mi.
1170 ft. **Site 2 of 2 in cluster AE**

Relative:
Higher

Actual:
599 ft.

CHICAGO TANKS:

Facility ID:	1900CAR1957-10-03
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	10/03/1957
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: W. N. SAMUEL INC.; INSTALL 1-3K GALLON FUEL OIL TANK FINAL 11/4/58
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.887706
Longitude:	-87.674856

AF126 **STANLY SPRING COMPANY** **TANKS** **S121836312**
NE **1859 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.225 mi.
1187 ft. **Site 1 of 4 in cluster AF**

Relative:
Higher

Actual:
599 ft.

CHICAGO TANKS:

Facility ID:	1859CAR1953-09-09
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	09/09/1953
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: HOOD CONSTRUCTION; INSPECT 1-1K GAL FUEL OIL FINAL 7/13/54
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.887725
Longitude:	-87.6733

AF127 **STANLY SPRING COMPANY** **TANKS** **S121836311**
NE **1859 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.225 mi.
1187 ft. **Site 2 of 4 in cluster AF**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	1859CAR1953-06-19
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	06/19/1953
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: KLEFSTAD ENGINEERING; INSTALL 1-1K GAL GUEL OIL TANK FINAL NONE GIVEN
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.887725
Longitude:	-87.6733

AG128 **CASE MOODY PIE COMPANY** **TANKS** **S121836099**
ENE **1818 W WALNUT ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.225 mi.
1190 ft. **Site 1 of 2 in cluster AG**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	1818WAL1961-08-10
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	08/10/1961
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: H. M. BOLES & SONS; INSTALL 1-8K GAL GSLN UST FINAL 1/15/62
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886036
Longitude:	-87.672665

AG129 **CASE MOODY PIE COMPANY** **TANKS** **S121836098**
ENE **1818 W WALNUT ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.225 mi.
1190 ft. **Site 2 of 2 in cluster AG**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	1818WAL1949-12-14
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported

CASE MOODY PIE COMPANY (Continued) **S121836098**

Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	12/14/1949
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: WATER TUBE BOILER & TANK; INSTALL 1-9.975 GAL FUEL OIL TANK FINAL 2/9/50
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.886036
Longitude:	-87.672665

AH130 **KALPAKE PAUL AND KENYA** **RCRA NonGen / NLR** **1000341080**
NW **2101 W CARROL** **FINDS** **ILD113560932**
1/8-1/4 **CHICAGO, IL 60612** **ECHO**
0.226 mi.
1192 ft. **Site 1 of 3 in cluster AH**

Relative:
Higher

Actual:
599 ft.

RCRA NonGen / NLR:

Date form received by agency:	05/04/1987
Facility name:	KALPAKE PAUL AND KENYA
Facility address:	2101 W CARROL CHICAGO, IL 60612
EPA ID:	ILD113560932
Mailing address:	2410 DORINA DR NORTHFIELD, IL 60093
Contact:	PAUL KALPAKE
Contact address:	2410 DORINA DR NORTHFIELD, IL 60093
Contact country:	US
Contact telephone:	847-441-6416
Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	KALPAKE PAUL AND KENYA
Owner/operator address:	2410 DORINA DR NORTHFIELD, IL 60093
Owner/operator country:	Not reported
Owner/operator telephone:	847-441-6416
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported
Owner/operator name:	NAME NOT REPORTED
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212

KALPAKE PAUL AND KENYA (Continued) **1000341080**

Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: F008
. Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Facility Has Received Notices of Violations:
Regulation violated: SR - 703.121(a)
Area of violation: TSD - General Facility Standards
Date violation determined: 06/13/1990
Date achieved compliance: 05/01/1997
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 08/23/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 722.134(a)
Area of violation: Generators - Pre-transport
Date violation determined: 06/13/1990
Date achieved compliance: 06/17/1993
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 08/23/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

KALPAKE PAUL AND KENYA (Continued) **1000341080**

Paid penalty amount: Not reported

Regulation violated: SR - 728.150(a)
Area of violation: LDR - General
Date violation determined: 06/13/1990
Date achieved compliance: 06/17/1993
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 08/23/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 725.212(a)
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 06/13/1990
Date achieved compliance: 06/17/1993
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 08/23/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 703.150(a)
Area of violation: TSD - General Facility Standards
Date violation determined: 06/13/1990
Date achieved compliance: 05/01/1997
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 08/23/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - 728.107(a)
Area of violation: LDR - General
Date violation determined: 06/13/1990
Date achieved compliance: 06/17/1993
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 08/23/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

KALPAKE PAUL AND KENYA (Continued) **1000341080**

Regulation violated: SR - 725.242(a)
Area of violation: TSD - Financial Requirements
Date violation determined: 06/13/1990
Date achieved compliance: 06/17/1993
Violation lead agency: State
Enforcement action: VIOLATION NOTICE (VN)
Enforcement action date: 08/23/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 07/22/1996
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/14/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/13/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 05/01/1997
Evaluation lead agency: State

Evaluation date: 06/13/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 06/17/1993
Evaluation lead agency: State

Evaluation date: 06/13/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 06/17/1993
Evaluation lead agency: State

Evaluation date: 06/13/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Financial Requirements
Date achieved compliance: 06/17/1993
Evaluation lead agency: State

Evaluation date: 06/13/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 06/17/1993
Evaluation lead agency: State

KALPAKE PAUL AND KENYA (Continued) **1000341080**

FINDS:

Registry ID: 110005846022

Environmental Interest/Information System

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000341080
Registry ID:	110005846022
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110005846022

AF131 **BERQUIST PLATING CO** **RCRA NonGen / NLR** **1000350782**
NE **1857-63 W CARROLL** **FINDS** **ILD005137948**
1/8-1/4 **CHICAGO, IL 60612** **ECHO**
0.229 mi.
1207 ft. **Site 3 of 4 in cluster AF**

Relative: **Higher**
Actual: **599 ft.**

RCRA NonGen / NLR:

Date form received by agency:	08/15/1980
Facility name:	BERQUIST PLATING CO
Facility address:	1857-63 W CARROLL CHICAGO, IL 60612
EPA ID:	ILD005137948
Contact:	DENNIS BERQUIST
Contact address:	1857-63 W CARROLL CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-666-6040
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	FOLKE G BERQUIST
Owner/operator address:	ADDRESS NOT REPORTED CITY NOT REPORTED, AK 99998
Owner/operator country:	Not reported
Owner/operator telephone:	312-555-1212
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private

BERQUIST PLATING CO (Continued) **1000350782**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: NAME NOT REPORTED
Owner/operator address: ADDRESS NOT REPORTED
CITY NOT REPORTED, AK 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-555-1212
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F006
. Waste name: WASTEWATER TREATMENT SLUDGES FROM ELECTROPLATING OPERATIONS EXCEPT FROM THE FOLLOWING PROCESSES: (1) SULFURIC ACID ANODIZING OF ALUMINUM; (2) TIN PLATING ON CARBON STEEL; (3) ZINC PLATING (SEGREGATED BASIS) ON CARBON STEEL; (4) ALUMINUM OR ZINC-ALUMINUM PLATING ON CARBON STEEL; (5) CLEANING/STRIPPING ASSOCIATED WITH TIN, ZINC AND ALUMINUM PLATING ON CARBON STEEL; AND (6) CHEMICAL ETCHING AND MILLING OF ALUMINUM.

. Waste code: F007
. Waste name: SPENT CYANIDE PLATING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS

. Waste code: F008

BERQUIST PLATING CO (Continued) **1000350782**

. Waste name: PLATING BATH RESIDUES FROM THE BOTTOM OF PLATING BATHS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

. Waste code: F009
. Waste name: SPENT STRIPPING AND CLEANING BATH SOLUTIONS FROM ELECTROPLATING OPERATIONS WHERE CYANIDES ARE USED IN THE PROCESS.

Violation Status: No violations found

FINDS:

Registry ID: 110005814743

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1000350782
Registry ID: 110005814743
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110005814743

AI132 **J.L. SCHEFFLER** **TANKS** **S121836130**
ENE **1823 W FULTON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.232 mi.
1225 ft. **Site 1 of 2 in cluster AI**

Relative: **Higher**
Actual: **600 ft.**

CHICAGO TANKS:
Facility ID: 182335W1961-06-23
Tank Type: UNDERGROUND STORAGE TANK
Owner: Not reported
Tank ID: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Substance: Not reported
Tank Capacity: Not reported
Install Date: 06/23/1961
Removal Date: Not reported
Last Used Date: Not reported
Comments: WORK BY: HOOD STEEL TANKS; INSTALL 1-3K FUEL OIL, FINAL 10/16/61
Data Source: HISTORIC DEPT. OF BUILDINGS
Latitude: 41.886837
Longitude: -87.672442

AF133 **ARRIATO MUTUAL PLATE COMPANY** **TANKS** **S121836264**
NE **1847 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.234 mi.
1236 ft. **Site 4 of 4 in cluster AF**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	1847CAR1952-06-10
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	06/10/1952
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: ARRIATO PLATE COMPANY; SANDFILL 1-3,000 GALLON FUEL OIL FINAL 6/12/52
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.887729
Longitude:	-87.673089

AJ134 **JOHN KARTIAS** **TANKS** **S121837039**
South **2000 W MADISON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.241 mi.
1272 ft. **Site 1 of 2 in cluster AJ**

Relative: **Lower**
Actual: **594 ft.**

CHICAGO TANKS:

Facility ID:	2000MAD1986-09-29
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	09/29/1986
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: R. W. COLLINS; REMOVE 2-7.5K GAS TANKS
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.881332
Longitude:	-87.676919

AJ135 **JOHN KARTIAS** **TANKS** **S121837038**
South **2000 W MADISON ST** **N/A**
1/8-1/4 **CHICAGO, IL**
0.241 mi.
1272 ft. **Site 2 of 2 in cluster AJ**

Relative: **Lower**
Actual: **594 ft.**

CHICAGO TANKS:

Facility ID:	2000MAD1964-02-11
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	Not reported
Tank ID:	Not reported

JOHN KARTIAS (Continued) **S121837038**

Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	Not reported
Tank Capacity:	Not reported
Install Date:	02/11/1964
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	WORK BY: N. GAGLIONE; INSPECT 2-7.5K GAS
Data Source:	HISTORIC DEPT. OF BUILDINGS
Latitude:	41.881332
Longitude:	-87.676919

136
East
1/8-1/4
0.245 mi.
1295 ft.

AMERICAN PLATING **ENG CONTROLS** **S106635168**
1800-1858 WEST LAKE STREET **INST CONTROL** **N/A**
CHICAGO, IL 60612 **SRP**

Relative:
Higher

Actual:
598 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316246210
NFR Letter:	05/19/2005
Date NFR Recorded:	09/29/2005
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Christopher Bambulas
RA Company:	Not reported
RA Address:	1756 West Lake Street
RA City,St,Zip:	Chicago, IL 60612
Worker Caution:	Yes
Acres:	1.79
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316246210
NFR Letter:	05/19/2005
Date NFR Recorded:	09/29/2005
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Christopher Bambulas
RA Company:	Not reported
RA Address:	1756 West Lake Street
RA City,St,Zip:	Chicago, IL 60612
Worker Caution:	Yes
Acres:	1.79
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No

AMERICAN PLATING (Continued) **S106635168**

Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316246210
US EPA Id:	IL0001172642
Longitude:	-87.673141
Latitude:	41.885451
Contact Name:	Christopher Bambulas
Contact Address:	1756 West Lake Street
Contact City,St,Zip:	Chicago 60612
Date Enrolled:	09/24/2004
Point Of Contact:	Joseph C. Kelly
Consultant Company:	Pioneer Engineering & Environmental Services, Inc.
Consultant Address:	700 North Sacramento Boulevard
Consultant City,St,Zip:	Chicago 60612
Proj Mgr Assigned:	James Baldwin
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Not reported

NFRDL:

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Christopher Bambulas
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	1756 West Lake Street
Remediation Applicant City,St,Zip:	Chicago, IL 60612
Illinois EPA:	0316246210
Site Name:	American Plating
NFR Letter:	2005-05-19
NFR Letter Date Recorded:	2005-09-29
Comprehensive/Focused:	Focused
Worker Caution:	Y
Acres:	1.79

AH137 **WEST LAKE PARTNERS** **TANKS** **S121839879**
NW **2114 W CARROLL AVE** **N/A**
1/8-1/4 **CHICAGO, IL**
0.248 mi.
1311 ft. **Site 2 of 3 in cluster AH**

Relative: **Higher**
Actual: **599 ft.**

CHICAGO TANKS:

Facility ID:	2033262
Tank Type:	UNDERGROUND STORAGE TANK
Owner:	See Environmental Permit Dataset
Tank ID:	1
Tank Material:	Not reported
Tank Construction:	Not reported
Substance:	HEATING OI
Tank Capacity:	12000
Install Date:	Not reported
Removal Date:	Not reported
Last Used Date:	Not reported
Comments:	2114-18 W CARROLL, REMOVED 4/15/1994, Historic data from former Dept. of Environment [Associated Permit Numbers: 100540;]
Data Source:	DEPT. OF PUBLIC HEALTH
Latitude:	41.887646
Longitude:	-87.679864

AH138 **WEST LAKE PARTNERS INC** **UST** **U001965202**
NW **2114-2138 W CARROLL** **BOL** **N/A**
1/8-1/4 **CHICAGO, IL 60612**
0.248 mi.
1311 ft. **Site 3 of 3 in cluster AH**

Relative: **Higher**
Actual: **599 ft.**

UST:

Facility ID:	2033262
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0023102
Owner Name:	West Lake Partners Inc
Owner Address:	200 N Dearborn Suite 1404
Owner City,St,Zip:	Chicago, IL 60601
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	12000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1974
OSFM First Notify Date:	5/23/1994
Red Tag Issue Date:	Not reported
Install Date:	12/31/1974
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported

WEST LAKE PARTNERS INC (Continued) **U001965202**

Removed Date: 4/15/1994
Abandoned Date: Not reported

BOL:
Site Id: 170000517787
Inv Num: 0316286242
Interest Name: West Lake Partners Inc
Interest Type: BOL
Media Code: LAND

AI139 **J.L. SCHEFFLER** **LUST** **S106401989**
ENE **1813-1817 WEST FULTON** **N/A**
1/4-1/2 **CHICAGO, IL 60612**
0.250 mi.
1322 ft. **Site 2 of 2 in cluster AI**

Relative: **Higher**
Actual: **599 ft.**

LUST:
Incident Num: 20031366
IL EPA Id: 316275235
Product: Other Petroleum
IEMA Date: 2003-09-16
Project Manager: Schwartzkopf
Project Manager Phone: Not reported
Email: Not reported
PRP Name: J.L. Scheffler
PRP Contact: Not reported
PRP Address: 1817 West Fulton
PRP City,St,Zip: Chicago, IL 60612
PRP Phone: 3127334733
Site Classification: Not reported
Section 57.5(g) Letter: Not reported
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 2003-09-23
45 Report Received: 2003-11-20
NFA/NFR Letter: 2004-03-12
NFR Date Recorded: 2004-04-05

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140 **HENRY HORNER HOMES REDEVELOPMENT AREA B** **LUST** **U004107027**
ESE **1804 WEST WASHINGTON BLVD.** **UST** **N/A**
1/4-1/2 **CHICAGO, IL 60612**
0.262 mi.
1382 ft.

Relative: **Lower**
Actual: **596 ft.**

LUST:
Incident Num: 20070521
IL EPA Id: 316275291
Product: Fuel Oil
IEMA Date: 2007-04-24
Project Manager: Not reported
Project Manager Phone: Not reported
Email: Not reported
PRP Name: Chicago Housing Authority
PRP Contact: Diane Martin
PRP Address: 60 East Van Buren, 13th Floor
PRP City,St,Zip: Chicago, IL 60605

HENRY HORNER HOMES REDEVELOPMENT AREA B (Continued) **U004107027**

PRP Phone:	3129137606
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2007-06-20
45 Report Received:	2008-10-29
NFA/NFR Letter:	**2008-11-14**
NFR Date Recorded:	2008-12-05

UST:

Facility ID:	2043635
Facility Status:	EXEMPT
Facility Type:	**NONE**
Owner Id:	U0002876
Owner Name:	Chicago Housing Authority
Owner Address:	60 East Van Buren, 13th Floor
Owner City,St,Zip:	Chicago, IL 60605
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	2000
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	8/14/2008
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	07-0521
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	4/24/2007
Abandoned Date:	Not reported

141
ENE
1/4-1/2
0.265 mi.
1401 ft.

J.L. SCHEFFLER TRANSPORT **LUST** **S105537817**
1801 WEST FULTON ST. **N/A**
CHICAGO, IL 60612

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	20021074
IL EPA Id:	316275216
Product:	Other Petroleum
IEMA Date:	2002-07-30
Project Manager:	Bauer
Project Manager Phone:	(217) 782-3335
Email:	Brian.Bauer@illinois.gov

J.L. SCHEFFLER TRANSPORT (Continued) **S105537817**

PRP Name:	J.L. Scheffler Transport
PRP Contact:	John Annson
PRP Address:	1801 West Fulton St.
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	3127334733
Site Classification:	Not reported
Section 57.5(g) Letter:	Not reported
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2002-10-04
45 Report Received:	2002-10-10
NFA/NFR Letter:	**2003-02-03**
NFR Date Recorded:	2003-05-01

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142 **CAST RITE STEEL CASTINGS CORP** **ENG CONTROLS** **S113269941**
NW **2135 WEST CARROLL AVENUE** **INST CONTROL** **N/A**
1/4-1/2 **CHICAGO, IL 60612** **SRP**
0.266 mi. **ASBESTOS**
1407 ft. **BOL**

Relative:
Higher

Actual:
599 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275244
NFR Letter:	01/11/2017
Date NFR Recorded:	01/17/2017
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Robert Kluk
RA Company:	Cast Rite Steel Castings Corp.
RA Address:	111 Hillshire Drive
RA City,St,Zip:	Inverness, IL 60010
Worker Caution:	No
Acres:	0.596
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275244
NFR Letter:	01/11/2017
Date NFR Recorded:	01/17/2017
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Robert Kluk
RA Company:	Cast Rite Steel Castings Corp.
RA Address:	111 Hillshire Drive
RA City,St,Zip:	Inverness, IL 60010
Worker Caution:	No
Acres:	0.596
Land Use:	Industrial/Commercial

CAST RITE STEEL CASTINGS CORP (Continued) **S113269941**

Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316275244
US EPA Id:	Not reported
Longitude:	-87.68101
Latitude:	41.887342
Contact Name:	Robert Kluk
Contact Address:	111 Hillshire Drive
Contact City,St,Zip:	Inverness 60010
Date Enrolled:	08/16/2016
Point Of Contact:	Nicholas J. Cuzzone
Consultant Company:	EPS Environmental Services, Inc.
Consultant Address:	7237 West Devon Avenue
Consultant City,St,Zip:	Chicago 60631
Proj Mgr Assigned:	Russell Irwin
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Cast Rite Steel Castings Corp.

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Robert Kluk
Remediation Applicant Company:	Cast Rite Steel Castings Corp.
Remediation Applicant Address:	111 Hillshire Drive
Remediation Applicant City,St,Zip:	Inverness, IL 60010
Illinois EPA:	0316275244
Site Name:	Cast Rite Steel Castings Corp
NFR Letter:	2017-01-11
NFR Letter Date Recorded:	2017-01-17
Comprehensive/Focused:	Focused
Worker Caution:	N
Acres:	0.596

CAST RITE STEEL CASTINGS CORP (Continued) **S113269941**

ASBESTOS:

Site ID:	170001568603
Notification Type:	Original
Received Date:	02/14/2017
Postmark Date:	02/07/2017
Start Date:	02/23/2017
End Date:	02/28/2017
Resubmission Date:	Not reported
Pipe AMT:	307
SA AMT:	Not reported
OFC AMT:	Not reported

BOL:

Site Id:	170001568603
Inv Num:	0316275244
Interest Name:	Cast-Rite Steel Casting Corp
Interest Type:	BOL
Media Code:	LAND

143
West
1/4-1/2
0.268 mi.
1417 ft.

CHA-HENRY HORNER HOMES (AREA A WEST - BUILDINGS 2D **ENG CONTROLS** **S106029703**
2215 WEST LAKE STREET **INST CONTROL** **N/A**
CHICAGO, IL 60612 **SRP**

Relative:
Higher

Actual:
597 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275169
NFR Letter:	06/05/2007
Date NFR Recorded:	06/20/2007
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Kimberly Worthington
RA Company:	City of Chicago Department of Environment
RA Address:	30 North LaSalle Street
RA City,St,Zip:	Chicago, IL 60605
Worker Caution:	Yes
Acres:	0.86
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	Yes

Illinois Epa Id:	0316275169
NFR Letter:	09/10/2007
Date NFR Recorded:	09/26/2007
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Kimberly Worthington
RA Company:	City of Chicago Department of Environment
RA Address:	30 North LaSalle Street

CHA-HENRY HORNER HOMES (AREA A WEST - BUILDINGS 2D, 3C, 3D & (Continued) **S106029703**

RA City,St,Zip:	Chicago, IL 60605
Worker Caution:	Yes
Acres:	0.44
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	Yes

Illinois Epa Id:	0316275169
NFR Letter:	05/24/2005
Date NFR Recorded:	06/08/2005
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Carl Byrd
RA Company:	Chicago Housing Authority
RA Address:	60 East Van Buren Street
RA City,St,Zip:	Chicago, IL 60605
Worker Caution:	Yes
Acres:	3.4
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275169
NFR Letter:	06/05/2007
Date NFR Recorded:	06/20/2007
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Kimberly Worthington
RA Company:	City of Chicago Department of Environment
RA Address:	30 North LaSalle Street
RA City,St,Zip:	Chicago, IL 60605
Worker Caution:	Yes
Acres:	0.86
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No

CHA-HENRY HORNER HOMES (AREA A WEST - BUILDINGS 2D, 3C, 3D & (Continued) **S106029703**

Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	Yes

Illinois EPA Id:	0316275169
NFR Letter:	09/10/2007
Date NFR Recorded:	09/26/2007
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Kimberly Worthington
RA Company:	City of Chicago Department of Environment
RA Address:	30 North LaSalle Street
RA City,St,Zip:	Chicago, IL 60605
Worker Caution:	Yes
Acres:	0.44
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	Yes

Illinois EPA Id:	0316275169
NFR Letter:	05/24/2005
Date NFR Recorded:	06/08/2005
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Carl Byrd
RA Company:	Chicago Housing Authority
RA Address:	60 East Van Buren Street
RA City,St,Zip:	Chicago, IL 60605
Worker Caution:	Yes
Acres:	3.4
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

CHA-HENRY HORNER HOMES (AREA A WEST - BUILDINGS 2D, 3C, 3D & (Continued) **S106029703**

SRP:

IL EPA Id:	0316275169
US EPA Id:	Not reported
Longitude:	-87.683091
Latitude:	41.884134
Contact Name:	John Gerut
Contact Address:	60 East Van Buren Street
Contact City,St,Zip:	Chicago 60605
Date Enrolled:	04/22/2002
Point Of Contact:	Ala E. Sassila, P.E.
Consultant Company:	Carnow, Conibear & Associates, Ltd.
Consultant Address:	600 West Van Buren Street
Consultant City,St,Zip:	Chicago 60606
Proj Mgr Assigned:	James Baldwin
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Chicago Housing Authority

NFRDL:

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	Yes
Remediation Applicant Name:	Kimberly Worthington
Remediation Applicant Company:	City of Chicago Department of Environment
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant City,St,Zip:	Chicago, IL 60605
Illinois EPA:	0316275169
Site Name:	CHA-Henry Horner Homes (Area A West - Buildings 2D, 3C, 3D & 3F)
NFR Letter:	2007-06-05
NFR Letter Date Recorded:	2007-06-20
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	0.86

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes

CHA-HENRY HORNER HOMES (AREA A WEST - BUILDINGS 2D, 3C, 3D & (Continued) **S106029703**

Clean Soil 10ft:	No
Alternate Barrier:	Yes
Remediation Applicant Name:	Kimberly Worthington
Remediation Applicant Company:	City of Chicago Department of Environment
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant City,St,Zip:	Chicago, IL 60605
Illinois EPA:	0316275169
Site Name:	CHA-Henry Horner Homes (Area A West-Buidings 1A & 1C)
NFR Letter:	2007-09-10
NFR Letter Date Recorded:	2007-09-26
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	0.44

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Carl Byrd
Remediation Applicant Company:	Chicago Housing Authority
Remediation Applicant Address:	60 East Van Buren Street
Remediation Applicant City,St,Zip:	Chicago, IL 60605
Illinois EPA:	0316275169
Site Name:	CHA-Henry Horner Homes (Buildings 1b, 1d, 2a, 2b, 2c, 3a, 3b & 3e)
NFR Letter:	2005-05-24
NFR Letter Date Recorded:	2005-06-08
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	3.4

144
NNW
1/4-1/2
0.291 mi.
1535 ft.

M.J. SEIWERT CARTAGE CO. **LUST** **S104528509**
2029 WEST HUBBARD ST. **N/A**
CHICAGO, IL 60612

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	980338
IL EPA Id:	316275141
Product:	Diesel
IEMA Date:	1998-02-16
Project Manager:	Kaiser
Project Manager Phone:	(217) 524-4650
Email:	Karl.Kaiser@illinois.gov
PRP Name:	M.J. Seiwert Cartage Co.
PRP Contact:	Pat O'Malley
PRP Address:	2029 West Hubbard St.

M.J. SEIWERT CARTAGE CO. (Continued) **S104528509**

PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	3127382700
Site Classification:	NFA
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1998-03-18
45 Report Received:	1998-05-08
NFA/NFR Letter:	**1999-07-14**
NFR Date Recorded:	1999-10-21

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145 **AVRAM BUILDERS LLC** **ENG CONTROLS** **S118096537**
ENE **1745 WEST WALNUT STREET** **INST CONTROL** **N/A**
1/4-1/2 **CHICAGO, IL 60612** **SRP**
0.292 mi. **BOL**
1544 ft.

Relative: **Higher**

Actual: **599 ft.**

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275371
NFR Letter:	03/14/2017
Date NFR Recorded:	Not reported
Comprehensive / Focused:	Focused
Remediation Applicant Name:	David Avram
RA Company:	Avram Builders LLC
RA Address:	1255 Bond Street
RA City,St,Zip:	Naperville, IL 60563
Worker Caution:	Yes
Acres:	0.898
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

Illinois Epa Id:	0316275371
NFR Letter:	03/09/2018
Date NFR Recorded:	Not reported
Comprehensive / Focused:	Focused
Remediation Applicant Name:	David Avram
RA Company:	Avram Builders LLC
RA Address:	1255 Bond Street
RA City,St,Zip:	Naperville, IL 60563
Worker Caution:	Yes
Acres:	0.898
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes

AVRAM BUILDERS LLC (Continued) **S118096537**

BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275371
NFR Letter:	03/14/2017
Date NFR Recorded:	Not reported
Comprehensive / Focused:	Focused
Remediation Applicant Name:	David Avram
RA Company:	Avram Builders LLC
RA Address:	1255 Bond Street
RA City,St,Zip:	Naperville, IL 60563
Worker Caution:	Yes
Acres:	0.898
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

Illinois EPA Id:	0316275371
NFR Letter:	03/09/2018
Date NFR Recorded:	Not reported
Comprehensive / Focused:	Focused
Remediation Applicant Name:	David Avram
RA Company:	Avram Builders LLC
RA Address:	1255 Bond Street
RA City,St,Zip:	Naperville, IL 60563
Worker Caution:	Yes
Acres:	0.898
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

AVRAM BUILDERS LLC (Continued) **S118096537**

SRP:

IL EPA Id:	0316275371
US EPA Id:	Not reported
Longitude:	-87.671166
Latitude:	41.885833
Contact Name:	David Avram
Contact Address:	1255 Bond Street
Contact City,St,Zip:	Naperville 60563
Date Enrolled:	05/15/2015
Point Of Contact:	Nicholas Cuzzone, P.E.
Consultant Company:	EPS Environmental Services, Inc.
Consultant Address:	7237 West Devon Avenue
Consultant City,St,Zip:	Chicago 60631
Proj Mgr Assigned:	Russell Irwin
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Avram Builders LLC

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	David Avram
Remediation Applicant Company:	Avram Builders LLC
Remediation Applicant Address:	1255 Bond Street
Remediation Applicant City,St,Zip:	Naperville, IL 60563
Illinois EPA:	0316275371
Site Name:	Avram Builders LLC
NFR Letter:	2018-03-09
NFR Letter Date Recorded:	Not reported
Comprehensive/Focused:	Focused
Worker Caution:	Y
Acres:	0.898

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No

AVRAM BUILDERS LLC (Continued) **S118096537**

Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	David Avram
Remediation Applicant Company:	Avram Builders LLC
Remediation Applicant Address:	1255 Bond Street
Remediation Applicant City,St,Zip:	Naperville, IL 60563
Illinois EPA:	0316275371
Site Name:	Avram Builders LLC
NFR Letter:	2017-03-14
NFR Letter Date Recorded:	Not reported
Comprehensive/Focused:	Focused
Worker Caution:	Y
Acres:	0.898

BOL:

Site Id:	170002101348
Inv Num:	0316275371
Interest Name:	Avram Builders LLC
Interest Type:	BOL
Media Code:	LAND

146
NE
1/4-1/2
0.293 mi.
1549 ft.

UNITED BINDERY SERVICE **LUST** **S104522096**
1805 WEST CARROLL ST. **N/A**
CHICAGO, IL 60612

Relative: Higher

Actual: 600 ft.

LUST:

Incident Num:	960709
IL EPA Id:	316275099
Product:	Not reported
IEMA Date:	1996-04-30
Project Manager:	Jones
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	United Bindery Service
PRP Contact:	Bruce Kosaka
PRP Address:	1845 West Carroll St.
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1997-01-17
45 Report Received:	1997-12-15
NFA/NFR Letter:	**2006-03-30**
NFR Date Recorded:	2006-05-17

147
West
1/4-1/2
0.302 mi.
1597 ft.

2221 WEST WALNUT, LLC
2221 WEST WALNUT AVENUE
CHICAGO, IL 60612

ENG CONTROLS
INST CONTROL
SRP

S112351843
N/A

Relative:
Higher

Actual:
598 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275351
NFR Letter:	10/23/2013
Date NFR Recorded:	12/02/2013
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Robert Kritt
RA Company:	2221 West Walnut, LLC
RA Address:	2000 West Carroll Avenue
RA City,St,Zip:	Chicago, IL 60612
Worker Caution:	Yes
Acres:	0.53
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275351
NFR Letter:	10/23/2013
Date NFR Recorded:	12/02/2013
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Robert Kritt
RA Company:	2221 West Walnut, LLC
RA Address:	2000 West Carroll Avenue
RA City,St,Zip:	Chicago, IL 60612
Worker Caution:	Yes
Acres:	0.53
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316275351

2221 WEST WALNUT, LLC (Continued) **S112351843**

US EPA Id:	Not reported
Longitude:	-87.682493
Latitude:	41.885485
Contact Name:	Robert Kritt
Contact Address:	2000 West Carroll Avenue
Contact City,St,Zip:	Chicago 60612
Date Enrolled:	12/13/2012
Point Of Contact:	Jeffrey Meyerhoff
Consultant Company:	Mostardi Platt
Consultant Address:	888 Industrial Drive
Consultant City,St,Zip:	Elmhurst 60126
Proj Mgr Assigned:	Jennifer Seul
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	2221 West Walnut, LLC

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Robert Kritt
Remediation Applicant Company:	2221 West Walnut, LLC
Remediation Applicant Address:	2000 West Carroll Avenue
Remediation Applicant City,St,Zip:	Chicago, IL 60612
Illinois EPA:	0316275351
Site Name:	2221 West Walnut, LLC
NFR Letter:	2013-10-23
NFR Letter Date Recorded:	2013-12-02
Comprehensive/Focused:	Focused
Worker Caution:	Y
Acres:	0.53

148
East
1/4-1/2
0.303 mi.
1602 ft.

Relative:
Higher

Actual:
598 ft.

HENRY HORNER HOMES AREA A EAST
150 N HERMITAGE
CHICAGO, IL 60612

ENG CONTROLS **1006807017**
INST CONTROL **ILR000115642**
SRP
RCRA NonGen / NLR
FINDS
ECHO

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275210
NFR Letter:	06/05/2007
Date NFR Recorded:	06/20/2007
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Carl Byrd
RA Company:	Chicago Housing Authority

HENRY HORNER HOMES AREA A EAST (Continued) **1006807017**

RA Address:	60 East Van Buren Street
RA City,St,Zip:	Chicago, IL 60602
Worker Caution:	No
Acres:	1
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

Illinois Epa Id:	0316275210
NFR Letter:	05/24/2005
Date NFR Recorded:	06/08/2005
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Kimberly Worthington
RA Company:	City of Chicago Department of Environment
RA Address:	30 North LaSalle Street
RA City,St,Zip:	Chicago, IL 60602
Worker Caution:	Yes
Acres:	3.1
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

Illinois Epa Id:	0316275210
NFR Letter:	06/29/2006
Date NFR Recorded:	08/11/2006
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Carl Byrd
RA Company:	Chicago Housing Authority
RA Address:	626 West Jackson Street
RA City,St,Zip:	Chicago, IL 60602
Worker Caution:	No
Acres:	0.97
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No

HENRY HORNER HOMES AREA A EAST (Continued) **1006807017**

Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275210
NFR Letter:	06/05/2007
Date NFR Recorded:	06/20/2007
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Carl Byrd
RA Company:	Chicago Housing Authority
RA Address:	60 East Van Buren Street
RA City,St,Zip:	Chicago, IL 60602
Worker Caution:	No
Acres:	1
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

Illinois EPA Id:	0316275210
NFR Letter:	05/24/2005
Date NFR Recorded:	06/08/2005
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Kimberly Worthington
RA Company:	City of Chicago Department of Environment
RA Address:	30 North LaSalle Street
RA City,St,Zip:	Chicago, IL 60602
Worker Caution:	Yes
Acres:	3.1
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

HENRY HORNER HOMES AREA A EAST (Continued) **1006807017**

Illinois EPA Id:	0316275210
NFR Letter:	06/29/2006
Date NFR Recorded:	08/11/2006
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Carl Byrd
RA Company:	Chicago Housing Authority
RA Address:	626 West Jackson Street
RA City,St,Zip:	Chicago, IL 60602
Worker Caution:	No
Acres:	0.97
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316275210
US EPA Id:	ILR000115642
Longitude:	-87.671271
Latitude:	41.884257
Contact Name:	John Gerut
Contact Address:	60 East Van Buren Street
Contact City,St,Zip:	Chicago 60605
Date Enrolled:	04/22/2002
Point Of Contact:	Samuel Peterson
Consultant Company:	Carnow, Conibear & Associates, Ltd.
Consultant Address:	600 West Van Buren Street
Consultant City,St,Zip:	Chicago 60607
Proj Mgr Assigned:	James Baldwin
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Chicago Housing Authority

NFRDL:

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

HENRY HORNER HOMES AREA A EAST (Continued) **1006807017**

Remediation Applicant Name:	Carl Byrd
Remediation Applicant Company:	Chicago Housing Authority
Remediation Applicant Address:	60 East Van Buren Street
Remediation Applicant City,St,Zip:	Chicago, IL 60602
Illinois EPA:	0316275210
Site Name:	Henry Horner Homes Area A East (Building 8D)
NFR Letter:	2007-06-05
NFR Letter Date Recorded:	2007-06-20
Comprehensive/Focused:	Comprehensive
Worker Caution:	N
Acres:	1
Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Kimberly Worthington
Remediation Applicant Company:	City of Chicago Department of Environment
Remediation Applicant Address:	30 North LaSalle Street
Remediation Applicant City,St,Zip:	Chicago, IL 60602
Illinois EPA:	0316275210
Site Name:	Henry Horner Homes Area A East (Buildings 8A, 8B, 8C, 8E, 8F, 12A & 12C)
NFR Letter:	2005-05-24
NFR Letter Date Recorded:	2005-06-08
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	3.1
Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Carl Byrd
Remediation Applicant Company:	Chicago Housing Authority
Remediation Applicant Address:	626 West Jackson Street
Remediation Applicant City,St,Zip:	Chicago, IL 60602
Illinois EPA:	0316275210

HENRY HORNER HOMES AREA A EAST (Continued) **1006807017**

Site Name:	Henry Horner Homes Area A East (Midrise Building)
NFR Letter:	2006-06-29
NFR Letter Date Recorded:	2006-08-11
Comprehensive/Focused:	Comprehensive
Worker Caution:	N
Acres:	0.97

RCRA NonGen / NLR:

Date form received by agency:	04/01/2006
Facility name:	HENRY HORNER HOMES AREA A EAST
Facility address:	150 N HERMITAGE CHICAGO, IL 60612
EPA ID:	ILR000115642
Contact:	ENV COORDINATOR
Contact address:	Not reported Not reported
Contact country:	US
Contact telephone:	312-742-8324
Contact email:	Not reported
EPA Region:	05
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHICAGO HOUSING AUTHORITY
Owner/operator address:	626 W JACKSON BLVD CHICAGO, IL 60661
Owner/operator country:	Not reported
Owner/operator telephone:	312-742-8324
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	District
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	HENRY HORNER HOMES AREA A EAST
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1900
Owner/Op end date:	Not reported

Owner/operator name:	HENRY HORNER HOMES AREA A EAST
Owner/operator address:	Not reported Not reported
Owner/operator country:	US
Owner/operator telephone:	Not reported

HENRY HORNER HOMES AREA A EAST (Continued) **1006807017**

Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/01/1900
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 09/19/2002
Site name: HENRY HORNER HOMES AREA A EAST
Classification: Large Quantity Generator

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

FINDS:

Registry ID: 110013296600

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZARDOUS WASTE BIENNIAL REPORTER

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:
Envid: 1006807017
Registry ID: 110013296600

HENRY HORNER HOMES AREA A EAST (Continued) **1006807017**

DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110013296600

149
SW
1/4-1/2
0.310 mi.
1638 ft.

WEST VILLAGE HOMES **INST CONTROL** **S108283014**
2155-2159 WEST WARREN BOULEVARD **SRP** **N/A**
CHICAGO, IL 60607

Relative:
Lower

Actual:
594 ft.

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316286479
NFR Letter:	04/18/2007
Date NFR Recorded:	Not reported
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Frank Mauro
RA Company:	New West Homes, L.L.C.
RA Address:	1440 West Taylor Street
RA City,St,Zip:	Chicago, IL 60607
Worker Caution:	No
Acres:	0.17
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316286479
US EPA Id:	Not reported
Longitude:	-87.681296
Latitude:	41.881898
Contact Name:	Frank Mauro
Contact Address:	1440 West Taylor Street
Contact City,St,Zip:	Chicago 60607
Date Enrolled:	12/20/2006
Point Of Contact:	Dakota Prentice
Consultant Company:	Pioneer Engineering & Environmental Services, Inc.
Consultant Address:	700 North Sacramento Boulevard
Consultant City,St,Zip:	Chicago 60612
Proj Mgr Assigned:	Tammy Smith
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	New West Homes, L.L.C.

NFRDL:

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	No

WEST VILLAGE HOMES (Continued) **S108283014**

Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Frank Mauro
Remediation Applicant Company:	New West Homes, L.L.C.
Remediation Applicant Address:	1440 West Taylor Street
Remediation Applicant City,St,Zip:	Chicago, IL 60607
Illinois EPA:	0316286479
Site Name:	West Village Homes
NFR Letter:	2007-04-18
NFR Letter Date Recorded:	Not reported
Comprehensive/Focused:	Focused
Worker Caution:	N
Acres:	0.17

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150 **TRI-STATE METALS** **LUST** **S104529707**
ENE **1745 FULTON ST.** **N/A**
1/4-1/2 **CHICAGO, IL 60612**
0.315 mi.
1663 ft.

Relative:
Higher

Actual:
600 ft.

LUST:

Incident Num:	991128
IL EPA Id:	316270019
Product:	Gasoline
IEMA Date:	1999-05-07
Project Manager:	Benanti
Project Manager Phone:	(217) 524-4649
Email:	Trent.Benanti@illinois.gov
PRP Name:	Tri-State Metals
PRP Contact:	Ed Angell
PRP Address:	1745 Fulton St.
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	7084743344
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1999-10-19
45 Report Received:	1999-11-02
NFA/NFR Letter:	**2015-01-22**
NFR Date Recorded:	Not reported

AK151 **BELL CHEMICAL CO** **LUST** **1000273864**
NNE **411 N WOLCOTT AVE** **RCRA NonGen / NLR** **ILD005120514**
1/4-1/2 **CHICAGO, IL 60622**
0.316 mi.
1667 ft. **Site 1 of 2 in cluster AK**

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	891997
IL EPA Id:	316245037
Product:	Non-Petroleum Product
IEMA Date:	1989-10-11
Project Manager:	Jones
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Bell Chemical Co.
PRP Contact:	Robert O'Malley
PRP Address:	411 North Wolcott
PRP City,St,Zip:	Chicago, IL 60622
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	2002-07-01
NFA/NFR Letter:	**2005-06-22**
NFR Date Recorded:	2005-08-15

Incident Num:	922379
IL EPA Id:	316245037
Product:	Non-Petroleum Product
IEMA Date:	1992-08-27
Project Manager:	Page
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Bell Chemical Co.
PRP Contact:	Chuck Falbo
PRP Address:	411 North Wolcott
PRP City,St,Zip:	Chicago, IL 60622-6281
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1992-09-18
45 Report Received:	1992-11-06
NFA/NFR Letter:	**1992-11-30**
NFR Date Recorded:	Not reported

RCRA NonGen / NLR:

Date form received by agency:	03/01/1994
Facility name:	BELL CHEMICAL CO
Facility address:	411 N WOLCOTT AVE CHICAGO, IL 60622
EPA ID:	ILD005120514
Mailing address:	411 N. WOLCOTT AVE CHICAGO, IL 60622
Contact:	RICHARD KELLY
Contact address:	Not reported

BELL CHEMICAL CO (Continued) **1000273864**

Not reported
Contact country: US
Contact telephone: 312-733-5960
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: BELL CHEMICAL COMPANY
Owner/operator address: 411 N WOLCOTT AVE
CITY NOT REPORTED, IL 99998
Owner/operator country: Not reported
Owner/operator telephone: 312-733-5960
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: BELL CHEMICAL COMPANY
Owner/operator address: 411 N WOLCOTT AVE
CHICAGO, IL 60622
Owner/operator country: Not reported
Owner/operator telephone: 312-733-5960
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 11/11/1980
Site name: BELL CHEMICAL CO
Classification: Not a generator, verified

BELL CHEMICAL CO (Continued) **1000273864**

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: U070
. Waste name: BENZENE, 1,2-DICHLORO-

. Waste code: U154
. Waste name: METHANOL (I)

. Waste code: U226
. Waste name: ETHANE, 1,1,1-TRICHLORO-

. Waste code: U239
. Waste name: BENZENE, DIMETHYL- (I,T)

Date form received by agency: 07/31/1980
Site name: BELL CHEMICAL CO
Classification: Not a generator, verified

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

BELL CHEMICAL CO (Continued) **1000273864**

. Waste code: F004
. Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: CRESOLS AND CRESYLIC ACID, AND NITROBENZENE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U070
. Waste name: BENZENE, 1,2-DICHLORO-

. Waste code: U071
. Waste name: BENZENE, 1,3-DICHLORO-

. Waste code: U154
. Waste name: METHANOL (I)

. Waste code: U226
. Waste name: ETHANE, 1,1,1-TRICHLORO-

. Waste code: U239
. Waste name: BENZENE, DIMETHYL- (I,T)

Violation Status: No violations found

152
SE
1/4-1/2
0.335 mi.
1768 ft.

METRO CHICAGO SPORTS FACILITY JOINT VENTURE **LUST** **S105815528**
1800 WEST MADISON **N/A**
CHICAGO, IL 60612

Relative:
Lower

Actual:
595 ft.

LUST:

Incident Num:	931591
IL EPA Id:	316275066
Product:	Fuel Oil
IEMA Date:	1993-06-14
Project Manager:	Harlow
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Metro Chicago Sports Facility Joint Venture
PRP Contact:	Vincent Violkowsky
PRP Address:	227 West Monroe St., Suite 3400
PRP City,St,Zip:	Chicago, IL 60606
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	1993-08-09
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

AK153
NNE
1/4-1/2
0.337 mi.
1778 ft.

RUBICON X WALCOTT, LLC
431 NORTH WALCOTT AVENUE
CHICAGO, IL 60622

Site 2 of 2 in cluster AK

LUST **S121171903**
N/A

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	20170792
IL EPA Id:	316246445
Product:	Other Petroleum
IEMA Date:	2017-08-30
Project Manager:	Malcom
Project Manager Phone:	(217) 524-9140
Email:	James.Malcom@illinois.gov
PRP Name:	Rubicon X Walcott, LLC
PRP Contact:	Gil Clark
PRP Address:	30 West Monroe Street, Suite 1700
PRP City,St,Zip:	Chicago, IL 60603
PRP Phone:	(312) 357-6465
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2017-09-15
45 Report Received:	2017-10-02
NFA/NFR Letter:	**2017-12-21**
NFR Date Recorded:	2018-01-05

154
North
1/4-1/2
0.341 mi.
1803 ft.

2000 HUBBARD, LLC
2000 WEST HUBBARD STREET
CHICAGO, IL 60612

LUST **S106781178**
N/A

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	20041754
IL EPA Id:	316275184
Product:	Gasoline, Diesel
IEMA Date:	2004-12-16
Project Manager:	McGill
Project Manager Phone:	(217) 524-5137
Email:	Scott.McGill@illinois.gov
PRP Name:	2000 Hubbard, LLC
PRP Contact:	Alex Nahonechuy
PRP Address:	2134 West Chicago Drive
PRP City,St,Zip:	Chicago, IL 60622
PRP Phone:	7737195574
Site Classification:	Not reported
Section 57.5(g) Letter:	Not reported
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2005-01-04
45 Report Received:	2005-02-22
NFA/NFR Letter:	**2005-05-04**
NFR Date Recorded:	1988-08-08

155
North
1/4-1/2
0.343 mi.
1809 ft.

MIDWEST WRECKING COMPANY
1950 WEST HUBBARD STREET
CHICAGO, IL 60622

LUST **S113808780**
SRP **N/A**

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	20130690
IL EPA Id:	316240023
Product:	Gasoline, Diesel, Used Oil
IEMA Date:	2013-06-18
Project Manager:	Wallace
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Midwest Wrecking Company
PRP Contact:	Daniel Lempa
PRP Address:	1950 West Hubbard Street
PRP City,St,Zip:	Chicago, IL 60622
PRP Phone:	8477917779
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	2013-07-08
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

SRP:

IL EPA Id:	0316240023
US EPA Id:	Not reported
Longitude:	-87.676376
Latitude:	41.890096
Contact Name:	Dan Lempa
Contact Address:	1950 West Hubbard Street
Contact City,St,Zip:	Chicago 60622
Date Enrolled:	05/21/2015
Point Of Contact:	Not reported
Consultant Company:	Environmental Group Services Limited
Consultant Address:	557 West Polk Street
Consultant City,St,Zip:	Chicago 60607
Proj Mgr Assigned:	Max Twum
Sec. 4 Letter Date:	Not reported
Active:	Yes
Remediation Applicant Co:	Lempa Partner LLC

156
SW
1/4-1/2
0.343 mi.
1810 ft.

CHICAGO, CITY OF
10 NORTH LEAVITT
CHICAGO, IL 60612

LUST **S105225825**
N/A

Relative:
Lower

Actual:
594 ft.

LUST:

Incident Num:	980934
IL EPA Id:	316275147
Product:	Diesel
IEMA Date:	1998-04-24
Project Manager:	Malcom
Project Manager Phone:	(217) 524-9140

CHICAGO, CITY OF (Continued) **S105225825**

Email:	James.Malcom@illinois.gov
PRP Name:	City of Chicago
PRP Contact:	Raul Valdivia
PRP Address:	30 North La Salle, Suite 2500
PRP City,St,Zip:	Chicago, IL 60602
PRP Phone:	3127443162
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	1999-03-12
20 Report Received:	1999-01-28
45 Report Received:	1999-01-28
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

157
NW
1/4-1/2
0.356 mi.
1880 ft.

CHICAGO MAILING TUBE CO. **LUST** **S104523011**
400 NORTH LEAVITT ST. **N/A**
CHICAGO, IL 60607

Relative:
Higher

Actual:
600 ft.

LUST:

Incident Num:	941910
IL EPA Id:	316006059
Product:	Other Petroleum
IEMA Date:	1994-08-23
Project Manager:	Nickell
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Chicago Mailing Tube Co.
PRP Contact:	Jim Meany
PRP Address:	327 North Aberdeen St.
PRP City,St,Zip:	Chicago, IL 60607
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	1994-11-18
Non LUST Determination Letter:	Not reported
20 Report Received:	1994-10-06
45 Report Received:	1994-10-17
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

158
ESE
1/4-1/2
0.373 mi.
1968 ft.

CHICAGO TRANSIT AUTHORITY **LUST** **S105958681**
1717 WEST WASHINGTON BLVD. **N/A**
CHICAGO, IL 60612

Relative:
Lower

Actual:
596 ft.

LUST:

Incident Num:	20031095
IL EPA Id:	316275230
Product:	Other Petroleum
IEMA Date:	2003-07-23
Project Manager:	Weller
Project Manager Phone:	(217) 524-4647

CHICAGO TRANSIT AUTHORITY (Continued) **S105958681**

Email:	Melinda.Weller@illinois.gov
PRP Name:	Chicago Transit Authority
PRP Contact:	Chuck Webber
PRP Address:	120 North Racine
PRP City,St,Zip:	Chicago, IL 60607
PRP Phone:	3124327045
Site Classification:	Not reported
Section 57.5(g) Letter:	Not reported
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	2005-02-09
20 Report Received:	2003-08-05
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

AL159 **CALCO PLATING CO** **INST CONTROL** **1008122985**
NE **414 N WOOD ST** **SRP** **N/A**
1/4-1/2 **CHICAGO, IL 60622** **AIRS**
0.378 mi. **BOL**
1997 ft. **Site 1 of 2 in cluster AL**

Relative: Higher

Actual: 601 ft.

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316240019
NFR Letter:	10/31/2017
Date NFR Recorded:	11/07/2017
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Gary Lappin
RA Company:	Baywood Partners, LLC
RA Address:	1821 West Hubbard Street
RA City,St,Zip:	Chicago, IL 60622
Worker Caution:	Yes
Acres:	0.29
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316240019
US EPA Id:	Not reported
Longitude:	-87.672337
Latitude:	41.889195
Contact Name:	Gary Lappin
Contact Address:	1821 West Hubbard Street
Contact City,St,Zip:	Chicago 60622
Date Enrolled:	09/01/2016
Point Of Contact:	Matthew Lewitke
Consultant Company:	Gabriel Environmental Services

CALCO PLATING CO (Continued) **1008122985**

Consultant Address:	1421 North Elston Avenue
Consultant City,St,Zip:	Chicago 60642
Proj Mgr Assigned:	Jeff Guy
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Baywood Partners, LLC

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Gary Lappin
Remediation Applicant Company:	Baywood Partners, LLC
Remediation Applicant Address:	1821 West Hubbard Street
Remediation Applicant City,St,Zip:	Chicago, IL 60622
Illinois EPA:	0316240019
Site Name:	Calco Plating Inc
NFR Letter:	2017-10-31
NFR Letter Date Recorded:	2017-11-07
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	0.29

AIRS:

2nd Address:	Not reported
Facility ID:	Not reported
Year:	2014
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FYG
Cease Operation Date:	Not reported
SIC Code:	3471
NAICS:	Not reported
Type Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FYG
Tons Per Year:	0.94985399999999998
Year:	Not reported
Pollutant Code:	PART

CALCO PLATING CO (Continued) **1008122985**

ID Number: 031600FYG
Tons Per Year: 0.29088399999999998
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 0.13786499999999999
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 2.0799999999999999E-2
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: Not reported
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: Not reported
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FYG
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FYG
Tons Per Year: 7.9999999999999996E-6
Year: 2009
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 8.2799999999999999E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0.10059999999999999
Year: 2008
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6

CALCO PLATING CO (Continued) **1008122985**

Year: 2009
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 0
Year: 2009
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0
Year: 2008
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 7.0000000000000001E-3
Year: 2008
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 0.0018
Year: 2009
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 0.0019
Year: 2009
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 0.0063
Year: 2008
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 5.0000000000000004E-6
Year: 2008
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 6.6199999999999995E-2
Year: 2009
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 9.8599999999999993E-2
Year: 2008
Pollutant Code: HCL

CALCO PLATING CO (Continued) **1008122985**

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 0.94985399999999998
Year: 2014
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0.29088399999999998
Year: 2014
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 0.13786499999999999
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 2.0799999999999999E-2
Year: 2014
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: 2014
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: 2014
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 0.10059999999999999
Year: 2008
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 7.9999999999999996E-6
Year: 2009
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 5.0000000000000004E-6

CALCO PLATING CO (Continued) **1008122985**

Year: 2008
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 0.0018
Year: 2009
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 8.2799999999999999E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0
Year: 2009
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0.0019
Year: 2009
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 6.6199999999999995E-2
Year: 2009
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 0.0063
Year: 2008
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 0
Year: 2008
Pollutant Code: SO2

CALCO PLATING CO (Continued) **1008122985**

ID Number:	031600FYG
Tons Per Year:	7.0000000000000001E-3
Year:	2008
Pollutant Code:	NIC
ID Number:	031600FYG
Tons Per Year:	9.8599999999999993E-2
Year:	2008
Pollutant Code:	HCL
ID Number:	031600FYG
Tons Per Year:	1.9999999999999999E-6
Year:	2008
Pollutant Code:	CR
ID Number:	031600FYG
Tons Per Year:	CF4
Year:	Not reported
Pollutant Code:	CF4
ID Number:	031600FYG
Tons Per Year:	COG
Year:	Not reported
Pollutant Code:	COG
2nd Address:	Not reported
Facility ID:	Not reported
Year:	Not reported
Contact Name:	Not reported
Contact Title:	Not reported
Contact Telephone:	Not reported
Contact Fax:	Not reported
Contact Ext:	Not reported
Contact Email:	Not reported
ID Number:	031600FYG
Cease Operation Date:	Not reported
SIC Code:	3471
NAICS:	Not reported
Type Code:	Not reported
Latitude:	Not reported
Longitude:	Not reported

Detail:

ID Number:	031600FYG
Tons Per Year:	0.94985399999999998
Year:	Not reported
Pollutant Code:	PART
ID Number:	031600FYG
Tons Per Year:	0.29088399999999998
Year:	Not reported
Pollutant Code:	PM10
ID Number:	031600FYG
Tons Per Year:	0.13786499999999999
Year:	Not reported
Pollutant Code:	PM2_5

CALCO PLATING CO (Continued) **1008122985**

ID Number: 031600FYG
Tons Per Year: 2.0799999999999999E-2
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: Not reported
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: Not reported
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FYG
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FYG
Tons Per Year: 7.9999999999999996E-6
Year: 2009
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 8.2799999999999999E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0.10059999999999999
Year: 2008
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 0

CALCO PLATING CO (Continued) **1008122985**

Year: 2009
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0
Year: 2008
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 7.0000000000000001E-3
Year: 2008
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 0.0018
Year: 2009
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 0.0019
Year: 2009
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 0.0063
Year: 2008
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 5.0000000000000004E-6
Year: 2008
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 6.6199999999999995E-2
Year: 2009
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 9.8599999999999993E-2
Year: 2008
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR6

CALCO PLATING CO (Continued) **1008122985**

ID Number: 031600FYG
Tons Per Year: 0.94985399999999998
Year: 2014
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0.29088399999999998
Year: 2014
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 0.13786499999999999
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 2.0799999999999999E-2
Year: 2014
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: 2014
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: 2014
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 0.10059999999999999
Year: 2008
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 7.9999999999999996E-6
Year: 2009
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 5.0000000000000004E-6
Year: 2008
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 0.0018

CALCO PLATING CO (Continued) **1008122985**

Year: 2009
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 8.2799999999999999E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0
Year: 2009
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0.0019
Year: 2009
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 6.6199999999999995E-2
Year: 2009
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 0.0063
Year: 2008
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 0
Year: 2008
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 7.0000000000000001E-3
Year: 2008
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 9.8599999999999993E-2
Year: 2008
Pollutant Code: HCL

CALCO PLATING CO (Continued) **1008122985**

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600FYG
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

2nd Address: Not reported
Facility ID: 14852
Year: 2006
Contact Name: Ron Hillstrand
Contact Title: Not reported
Contact Telephone: 312-337-6201
Contact Fax: 312-733-1331
Contact Ext: Not reported
Contact Email: Not reported
ID Number: 031600FYG
Cease Operation Date: Not reported
SIC Code: 3471
NAICS: Not reported
Type Code: LOC
Latitude: 41.884700
Longitude: -87.687500

Detail:
ID Number: 031600FYG
Tons Per Year: 0.94985399999999998
Year: Not reported
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0.29088399999999998
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 0.13786499999999999
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 2.0799999999999999E-2
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: Not reported
Pollutant Code: CR

CALCO PLATING CO (Continued) **1008122985**

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: Not reported
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FYG
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FYG
Tons Per Year: 7.9999999999999996E-6
Year: 2009
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 8.2799999999999999E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0.10059999999999999
Year: 2008
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 0
Year: 2009
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0
Year: 2008
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 7.0000000000000001E-3

CALCO PLATING CO (Continued) **1008122985**

Year: 2008
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 0.0018
Year: 2009
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 0.0019
Year: 2009
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 0.0063
Year: 2008
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 5.0000000000000004E-6
Year: 2008
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 6.6199999999999995E-2
Year: 2009
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 9.8599999999999993E-2
Year: 2008
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 0.94985399999999998
Year: 2014
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0.29088399999999998
Year: 2014
Pollutant Code: PM10

CALCO PLATING CO (Continued) **1008122985**

ID Number:	031600FYG
Tons Per Year:	0.13786499999999999
Year:	2014
Pollutant Code:	PM2_5
ID Number:	031600FYG
Tons Per Year:	2.0799999999999999E-2
Year:	2014
Pollutant Code:	SO2
ID Number:	031600FYG
Tons Per Year:	0.014709
Year:	2014
Pollutant Code:	CR
ID Number:	031600FYG
Tons Per Year:	0.014709
Year:	2014
Pollutant Code:	CR6
ID Number:	031600FYG
Tons Per Year:	0.10059999999999999
Year:	2008
Pollutant Code:	PART
ID Number:	031600FYG
Tons Per Year:	7.9999999999999996E-6
Year:	2009
Pollutant Code:	PM10
ID Number:	031600FYG
Tons Per Year:	1.9999999999999999E-6
Year:	2008
Pollutant Code:	PM2_5
ID Number:	031600FYG
Tons Per Year:	5.0000000000000004E-6
Year:	2008
Pollutant Code:	PM10
ID Number:	031600FYG
Tons Per Year:	3.9999999999999998E-6
Year:	2009
Pollutant Code:	PM2_5
ID Number:	031600FYG
Tons Per Year:	0.0018
Year:	2009
Pollutant Code:	NIC
ID Number:	031600FYG
Tons Per Year:	8.2799999999999999E-2
Year:	2009
Pollutant Code:	PART
ID Number:	031600FYG
Tons Per Year:	0

CALCO PLATING CO (Continued) **1008122985**

Year: 2009
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0.0019
Year: 2009
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 6.6199999999999995E-2
Year: 2009
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 0.0063
Year: 2008
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 0
Year: 2008
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 7.0000000000000001E-3
Year: 2008
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 9.8599999999999993E-2
Year: 2008
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

CALCO PLATING CO (Continued) **1008122985**

ID Number: 031600FYG
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

2nd Address: Not reported
Facility ID: Not reported
Year: 2009
Contact Name: Not reported
Contact Title: Not reported
Contact Telephone: Not reported
Contact Fax: Not reported
Contact Ext: Not reported
Contact Email: Not reported
ID Number: 031600FYG
Cease Operation Date: Not reported
SIC Code: 3471
NAICS: Not reported
Type Code: Not reported
Latitude: Not reported
Longitude: Not reported

Detail:
ID Number: 031600FYG
Tons Per Year: 0.94985399999999998
Year: Not reported
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0.29088399999999998
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 0.13786499999999999
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 2.0799999999999999E-2
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: Not reported
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: Not reported
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

CALCO PLATING CO (Continued) **1008122985**

ID Number:	031600FYG
Tons Per Year:	COG
Year:	2014
Pollutant Code:	COG
ID Number:	031600FYG
Tons Per Year:	7.9999999999999996E-6
Year:	2009
Pollutant Code:	PM10
ID Number:	031600FYG
Tons Per Year:	3.9999999999999998E-6
Year:	2009
Pollutant Code:	PM2_5
ID Number:	031600FYG
Tons Per Year:	8.2799999999999999E-2
Year:	2009
Pollutant Code:	PART
ID Number:	031600FYG
Tons Per Year:	0.10059999999999999
Year:	2008
Pollutant Code:	PART
ID Number:	031600FYG
Tons Per Year:	3.9999999999999998E-6
Year:	2009
Pollutant Code:	CR
ID Number:	031600FYG
Tons Per Year:	1.9999999999999999E-6
Year:	2008
Pollutant Code:	CR
ID Number:	031600FYG
Tons Per Year:	0
Year:	2009
Pollutant Code:	SO2
ID Number:	031600FYG
Tons Per Year:	0
Year:	2008
Pollutant Code:	SO2
ID Number:	031600FYG
Tons Per Year:	7.0000000000000001E-3
Year:	2008
Pollutant Code:	NIC
ID Number:	031600FYG
Tons Per Year:	0.0018
Year:	2009
Pollutant Code:	NIC
ID Number:	031600FYG
Tons Per Year:	0.0019

CALCO PLATING CO (Continued) **1008122985**

Year: 2009
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 0.0063
Year: 2008
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 5.0000000000000004E-6
Year: 2008
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 6.6199999999999995E-2
Year: 2009
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 9.8599999999999993E-2
Year: 2008
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 0.94985399999999998
Year: 2014
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0.29088399999999998
Year: 2014
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 0.13786499999999999
Year: 2014
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 2.0799999999999999E-2
Year: 2014
Pollutant Code: SO2

CALCO PLATING CO (Continued) **1008122985**

ID Number:	031600FYG
Tons Per Year:	0.014709
Year:	2014
Pollutant Code:	CR
ID Number:	031600FYG
Tons Per Year:	0.014709
Year:	2014
Pollutant Code:	CR6
ID Number:	031600FYG
Tons Per Year:	0.10059999999999999
Year:	2008
Pollutant Code:	PART
ID Number:	031600FYG
Tons Per Year:	7.9999999999999996E-6
Year:	2009
Pollutant Code:	PM10
ID Number:	031600FYG
Tons Per Year:	1.9999999999999999E-6
Year:	2008
Pollutant Code:	PM2_5
ID Number:	031600FYG
Tons Per Year:	5.0000000000000004E-6
Year:	2008
Pollutant Code:	PM10
ID Number:	031600FYG
Tons Per Year:	3.9999999999999998E-6
Year:	2009
Pollutant Code:	PM2_5
ID Number:	031600FYG
Tons Per Year:	0.0018
Year:	2009
Pollutant Code:	NIC
ID Number:	031600FYG
Tons Per Year:	8.2799999999999999E-2
Year:	2009
Pollutant Code:	PART
ID Number:	031600FYG
Tons Per Year:	0
Year:	2009
Pollutant Code:	SO2
ID Number:	031600FYG
Tons Per Year:	0.0019
Year:	2009
Pollutant Code:	CNC
ID Number:	031600FYG
Tons Per Year:	3.9999999999999998E-6

CALCO PLATING CO (Continued) **1008122985**

Year: 2009
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 6.6199999999999995E-2
Year: 2009
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 0.0063
Year: 2008
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 0
Year: 2008
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 7.0000000000000001E-3
Year: 2008
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 9.8599999999999993E-2
Year: 2008
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600FYG
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

2nd Address: Not reported
Facility ID: Not reported
Year: 2008

CALCO PLATING CO (Continued) **1008122985**

Contact Name: Not reported
Contact Title: Not reported
Contact Telephone: Not reported
Contact Fax: Not reported
Contact Ext: Not reported
Contact Email: Not reported
ID Number: 031600FYG
Cease Operation Date: Not reported
SIC Code: 3471
NAICS: Not reported
Type Code: Not reported
Latitude: Not reported
Longitude: Not reported

Detail:

ID Number: 031600FYG
Tons Per Year: 0.94985399999999998
Year: Not reported
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0.29088399999999998
Year: Not reported
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 0.13786499999999999
Year: Not reported
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 2.0799999999999999E-2
Year: Not reported
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: Not reported
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 0.014709
Year: Not reported
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: CF4
Year: 2014
Pollutant Code: CF4

ID Number: 031600FYG
Tons Per Year: COG
Year: 2014
Pollutant Code: COG

ID Number: 031600FYG
Tons Per Year: 7.9999999999999996E-6
Year: 2009

CALCO PLATING CO (Continued) **1008122985**

Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 8.2799999999999999E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0.10059999999999999
Year: 2008
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 0
Year: 2009
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0
Year: 2008
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 7.0000000000000001E-3
Year: 2008
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 0.0018
Year: 2009
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 0.0019
Year: 2009
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 0.0063
Year: 2008
Pollutant Code: CNC

CALCO PLATING CO (Continued) **1008122985**

ID Number:	031600FYG
Tons Per Year:	1.9999999999999999E-6
Year:	2008
Pollutant Code:	PM2_5
ID Number:	031600FYG
Tons Per Year:	5.0000000000000004E-6
Year:	2008
Pollutant Code:	PM10
ID Number:	031600FYG
Tons Per Year:	6.6199999999999995E-2
Year:	2009
Pollutant Code:	HCL
ID Number:	031600FYG
Tons Per Year:	9.8599999999999993E-2
Year:	2008
Pollutant Code:	HCL
ID Number:	031600FYG
Tons Per Year:	3.9999999999999998E-6
Year:	2009
Pollutant Code:	CR6
ID Number:	031600FYG
Tons Per Year:	1.9999999999999999E-6
Year:	2008
Pollutant Code:	CR6
ID Number:	031600FYG
Tons Per Year:	0.94985399999999998
Year:	2014
Pollutant Code:	PART
ID Number:	031600FYG
Tons Per Year:	0.29088399999999998
Year:	2014
Pollutant Code:	PM10
ID Number:	031600FYG
Tons Per Year:	0.13786499999999999
Year:	2014
Pollutant Code:	PM2_5
ID Number:	031600FYG
Tons Per Year:	2.0799999999999999E-2
Year:	2014
Pollutant Code:	SO2
ID Number:	031600FYG
Tons Per Year:	0.014709
Year:	2014
Pollutant Code:	CR
ID Number:	031600FYG
Tons Per Year:	0.014709

CALCO PLATING CO (Continued) **1008122985**

Year: 2014
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 0.10059999999999999
Year: 2008
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 7.9999999999999996E-6
Year: 2009
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 5.0000000000000004E-6
Year: 2008
Pollutant Code: PM10

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: PM2_5

ID Number: 031600FYG
Tons Per Year: 0.0018
Year: 2009
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 8.2799999999999999E-2
Year: 2009
Pollutant Code: PART

ID Number: 031600FYG
Tons Per Year: 0
Year: 2009
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 0.0019
Year: 2009
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR6

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR6

CALCO PLATING CO (Continued) **1008122985**

ID Number: 031600FYG
Tons Per Year: 3.9999999999999998E-6
Year: 2009
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: 6.6199999999999995E-2
Year: 2009
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 0.0063
Year: 2008
Pollutant Code: CNC

ID Number: 031600FYG
Tons Per Year: 0
Year: 2008
Pollutant Code: SO2

ID Number: 031600FYG
Tons Per Year: 7.0000000000000001E-3
Year: 2008
Pollutant Code: NIC

ID Number: 031600FYG
Tons Per Year: 9.8599999999999993E-2
Year: 2008
Pollutant Code: HCL

ID Number: 031600FYG
Tons Per Year: 1.9999999999999999E-6
Year: 2008
Pollutant Code: CR

ID Number: 031600FYG
Tons Per Year: CF4
Year: Not reported
Pollutant Code: CF4

ID Number: 031600FYG
Tons Per Year: COG
Year: Not reported
Pollutant Code: COG

BOL:
Site Id: 170000059727
Inv Num: 0316240019
Interest Name: Calco Plating Inc
Interest Type: BOL
Media Code: LAND

160 West 1/4-1/2 0.380 mi. 2009 ft.

CLEARWATER FISHERIES
2300-2340 WEST LAKE STREET
CHICAGO, IL 60612

ENG CONTROLS
INST CONTROL
SRP

S104872947
N/A

Relative: Lower

Actual: 596 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275190
NFR Letter:	07/14/2008
Date NFR Recorded:	08/04/2008
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Stephen Levaditis
RA Company:	2300 West Lake Street, L.L.C.
RA Address:	111 South Wacker Drive
RA City,St,Zip:	Chicago, IL 60606
Worker Caution:	Yes
Acres:	4.18
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275190
NFR Letter:	07/14/2008
Date NFR Recorded:	08/04/2008
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	Stephen Levaditis
RA Company:	2300 West Lake Street, L.L.C.
RA Address:	111 South Wacker Drive
RA City,St,Zip:	Chicago, IL 60606
Worker Caution:	Yes
Acres:	4.18
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316275190

CLEARWATER FISHERIES (Continued) **S104872947**

US EPA Id:	Not reported
Longitude:	-87.685081
Latitude:	41.885216
Contact Name:	Stephen Levaditis
Contact Address:	111 South Wacker Drive
Contact City,St,Zip:	Chicago 60606
Date Enrolled:	11/17/2000
Point Of Contact:	Ashok Guntaka
Consultant Company:	Great Lakes Soil & Environmental
Consultant Address:	600 Territorial Drive
Consultant City,St,Zip:	Bolingbrook 60440
Proj Mgr Assigned:	Tammy Smith
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	2300 West Lake Street, L.L.C.

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Stephen Levaditis
Remediation Applicant Company:	2300 West Lake Street, L.L.C.
Remediation Applicant Address:	111 South Wacker Drive
Remediation Applicant City,St,Zip:	Chicago, IL 60606
Illinois EPA:	0316275190
Site Name:	Clearwater Fisheries
NFR Letter:	2008-07-14
NFR Letter Date Recorded:	2008-08-04
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	4.18

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161 **A EICOFF CO.** **LUST** **S104526781**
North **2027 WEST GRAND** **N/A**
1/4-1/2 **CHICAGO, IL 60618**
0.391 mi.
2062 ft.

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	902270
IL EPA Id:	316160013
Product:	Gasoline
IEMA Date:	1990-08-09
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported

A EICOFF CO. (Continued) **S104526781**

PRP Name:	A Eicoff Co..
PRP Contact:	Carol Darr
PRP Address:	401 North Michigan Ave.
PRP City,St,Zip:	Chicago, IL 60611
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**2012-09-04**
NFR Date Recorded:	Not reported

AL162 **GEORGE JEWELL SERVICES LTD.** **LUST** **S104525424**
NE **424 NORTH WOOD ST.** **N/A**
1/4-1/2 **CHICAGO, IL 60622**
0.391 mi.
2062 ft. **Site 2 of 2 in cluster AL**

Relative: LUST:
Higher
Actual:
601 ft.

Incident Num:	913316
IL EPA Id:	316245121
Product:	Fuel Oil
IEMA Date:	1991-11-15
Project Manager:	Irwin
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	George Jewell Services Ltd.
PRP Contact:	Don Kosar
PRP Address:	424 North Wood St.
PRP City,St,Zip:	Chicago, IL 60622
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1992-01-13
45 Report Received:	1992-06-17
NFA/NFR Letter:	**1992-07-01**
NFR Date Recorded:	Not reported

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163 **CHICAGO EMBROIDERY CO** **LUST** **U003668512**
NW **418 NORTH LEAVITT** **UST** **N/A**
1/4-1/2 **CHICAGO, IL 60612**
0.393 mi.
2075 ft.

Relative: LUST:
Higher
Actual:
599 ft.

Incident Num:	983146
IL EPA Id:	316085332
Product:	Other Petroleum
IEMA Date:	1998-12-23
Project Manager:	Rossi
Project Manager Phone:	(217) 782-9285
Email:	Jenny.Rossi@illinois.gov

CHICAGO EMBROIDERY CO (Continued) **U003668512**

PRP Name:	Chicago Embroidery Co.
PRP Contact:	Ted Kwiatkowski
PRP Address:	418 North Leavitt St.
PRP City,St,Zip:	Chicago, IL 60610
PRP Phone:	3122435263
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1999-12-07
45 Report Received:	1999-12-07
NFA/NFR Letter:	**2000-02-24**
NFR Date Recorded:	2000-03-17

UST:

Facility ID:	2038587
Facility Status:	EXEMPT
Facility Type:	**INDUSTRIAL / MANUFACTURING**
Owner Id:	U0028405
Owner Name:	Chicago Embroidery Co
Owner Address:	1715 West Ohio Street
Owner City,St,Zip:	Chicago, IL 60622
Tank Number:	1
Tank Status:	**Exempt from registration**
Tank Capacity:	1500
Tank Substance:	Heating Oil
Last Used Date:	12/31/1973
OSFM First Notify Date:	1/5/1999
Red Tag Issue Date:	Not reported
Install Date:	Not reported
Green Tag Decal:	**Not reported**
Green Tag Issue Date:	**Not reported**
Green Tag Expire Date:	**Not reported**
Fee Due:	Not reported
Motor Fuel Permit Inspection Date:	Not reported
Motor Fuel Permit Expiration Date:	Not reported
MOTOR FUEL TYPE:	Not reported
Pending Nov:	N
IEMA:	Not reported
Equipment Type:	Not reported
Equipment:	Not reported
Last Passing Date:	Not reported
Test Expire Date:	Not reported
Removed Date:	12/22/1998
Abandoned Date:	Not reported

164
SW
1/4-1/2
0.399 mi.
2107 ft.

2200 LLC/2200 WEST MADISON GROUP **LUST S108480282**
2220 WEST MADISON STREET **N/A**
CHICAGO, IL 60612

Relative:
Lower

Actual:
593 ft.

LUST:

Incident Num:	20070162
IL EPA Id:	316275286
Product:	Other Petroleum

2200 LLC/2200 WEST MADISON GROUP (Continued) **S108480282**

IEMA Date:	2007-02-16
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	2200 LLC/2200 West Madison Group
PRP Contact:	John Luce
PRP Address:	2222 West Warren Boulevard
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	3124378200
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

165
ENE
1/4-1/2
0.414 mi.
2187 ft.

NATIONAL WASTE SERVICES **LUST** **S104521658**
1700 WEST CARROLL ST. **N/A**
CHICAGO, IL 60612

Relative:
Higher

Actual:
600 ft.

LUST:

Incident Num:	970155
IL EPA Id:	316003085
Product:	Used Oil
IEMA Date:	1997-01-27
Project Manager:	Zuehlke
Project Manager Phone:	(217) 557-6937
Email:	Wayne.Zuehlke@illinois.gov
PRP Name:	National Waste Services
PRP Contact:	Teale Smith
PRP Address:	2608 South Damen Ave.
PRP City,St,Zip:	Chicago, IL 60608
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1997-08-25
45 Report Received:	1997-08-25
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	952237
IL EPA Id:	316003085
Product:	Diesel
IEMA Date:	1995-10-30
Project Manager:	Zuehlke
Project Manager Phone:	(217) 557-6937
Email:	Wayne.Zuehlke@illinois.gov
PRP Name:	National Waste Services
PRP Contact:	Marty Heise
PRP Address:	2608 South Damen Ave.
PRP City,St,Zip:	Chicago, IL 60608
PRP Phone:	Not reported

NATIONAL WASTE SERVICES (Continued) **S104521658**

Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1997-08-25
45 Report Received:	1997-08-25
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

166
North
1/4-1/2
0.415 mi.
2189 ft.

ALBANY STEEL & BRASS CORP.
1940 WEST GRAND AVENUE
CHICAGO, IL 60622

ENG CONTROLS
INST CONTROL
SRP

S104491661
N/A

Relative:
Higher

Actual:
599 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316325262
NFR Letter:	05/21/1997
Date NFR Recorded:	06/27/1997
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	David Lebovitz
RA Company:	Albany Steel & Brass Company
RA Address:	1940 West Grand Avenue
RA City,St,Zip:	Chicago, IL 60622
Worker Caution:	Yes
Acres:	0.2
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316325262
NFR Letter:	05/21/1997
Date NFR Recorded:	06/27/1997
Comprehensive / Focused:	Comprehensive
Remediation Applicant Name:	David Lebovitz
RA Company:	Albany Steel & Brass Company
RA Address:	1940 West Grand Avenue
RA City,St,Zip:	Chicago, IL 60622
Worker Caution:	Yes
Acres:	0.2
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No

ALBANY STEEL & BRASS CORP. (Continued) **S104491661**

BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316325262
US EPA Id:	Not reported
Longitude:	-87.675303
Latitude:	41.891076
Contact Name:	David Lebovitz
Contact Address:	1940 West Grand Avenue
Contact City,St,Zip:	Chicago 60622
Date Enrolled:	02/28/1997
Point Of Contact:	Michael Cannizzo
Consultant Company:	Pioneer Environmental, Inc.
Consultant Address:	700 North Sacramento Boulevard
Consultant City,St,Zip:	Chicago 60612
Proj Mgr Assigned:	Not assigned
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Albany Steel & Brass Corp.

NFRDL:

Effective:	True
Land Use:	Residential or Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	No
Slab on Grade:	No
BCT:	No
Building Slab:	Yes
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	Yes
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	David Lebovitz
Remediation Applicant Company:	Albany Steel & Brass Company
Remediation Applicant Address:	1940 West Grand Avenue
Remediation Applicant City,St,Zip:	Chicago, IL 60622
Illinois EPA:	0316325262
Site Name:	Albany Steel & Brass Corp.
NFR Letter:	1997-05-21
NFR Letter Date Recorded:	1997-06-27
Comprehensive/Focused:	Comprehensive
Worker Caution:	Y
Acres:	0.2

AM167
WNW
1/4-1/2
0.415 mi.
2189 ft.

LANCER CORP.
339 NORTH OAKLEY
CHICAGO, IL 60612

Site 1 of 2 in cluster AM

LUST **S104525791**
N/A

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	912103
IL EPA Id:	316275048
Product:	Fuel Oil
IEMA Date:	1991-07-31
Project Manager:	Lowder
Project Manager Phone:	(217) 785-5734
Email:	Mike.Lowder@illinois.gov
PRP Name:	Lancer Corp.
PRP Contact:	Jack Thomas
PRP Address:	235 West Turbo
PRP City,St,Zip:	San Antonio, TX 78216
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1992-06-11
45 Report Received:	1992-06-11
NFA/NFR Letter:	**1992-06-26**
NFR Date Recorded:	Not reported

168
ESE
1/4-1/2
0.419 mi.
2212 ft.

WARREN PAULINA STANDARD
1701 WEST WARREN BLVD.
CHICAGO, IL 60612

LUST **S104523538**
N/A

Relative:
Lower

Actual:
596 ft.

LUST:

Incident Num:	932761
IL EPA Id:	316286246
Product:	Gasoline, Fuel Oil, Used Oil
IEMA Date:	1993-10-19
Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Warren Paulina Standard
PRP Contact:	Daniel Vinson
PRP Address:	3333 West Maypole
PRP City,St,Zip:	Chicago, IL 60624
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

169
East
1/4-1/2
0.424 mi.
2239 ft.

Relative:
Higher

Actual:
598 ft.

MIDWEST ELECTRIC MFG CORP
1639 W WALNUT
CHICAGO, IL

SEMS-ARCHIVE
CORRACTS
LUST
ENG CONTROLS
INST CONTROL
SRP
RCRA NonGen / NLR
2020 COR ACTION

1000436551
ILD059453373

SEMS Archive:

Site ID:	506803
EPA ID:	ILD059453373
Cong District:	7
FIPS Code:	17031
FF:	N
NPL:	Not on the NPL
Non NPL Status:	Deferred to RCRA (Subtitle C)

SEMS Archive Detail:

Region:	5
Site ID:	506803
EPA ID:	ILD059453373
Site Name:	MIDWEST ELECTRIC MANUFACTURING CORP.
NPL:	N
FF:	N
OU:	0
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	1995-12-01 00:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse

Region:	5
Site ID:	506803
EPA ID:	ILD059453373
Site Name:	MIDWEST ELECTRIC MANUFACTURING CORP.
NPL:	N
FF:	N
OU:	0
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	Not reported
Finish Date:	1992-07-20 00:00:00
Qual:	D
Current Action Lead:	EPA Perf

Region:	5
Site ID:	506803
EPA ID:	ILD059453373
Site Name:	MIDWEST ELECTRIC MANUFACTURING CORP.
NPL:	N
FF:	N
OU:	0
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1992-04-16 00:00:00

MIDWEST ELECTRIC MFG CORP (Continued) **1000436551**

Finish Date: 1992-04-16 00:00:00
Qual: Not reported
Current Action Lead: EPA Perf

CORRACTS:

EPA ID: ILD059453373
EPA Region: 5
Area Name: ENTIRE FACILITY
Actual Date: 20130910
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 335932
Noncurrent-Carrying Wiring Device Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD059453373
EPA Region: 5
Area Name: ENTIRE FACILITY
Actual Date: 20130910
Action: CA550RC
NAICS Code(s): 335932
Noncurrent-Carrying Wiring Device Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD059453373
EPA Region: 5
Area Name: ENTIRE FACILITY
Actual Date: 19920914
Action: CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
NAICS Code(s): 335932
Noncurrent-Carrying Wiring Device Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD059453373
EPA Region: 5
Area Name: ENTIRE FACILITY
Actual Date: 20160715
Action: CA900CR
NAICS Code(s): 335932
Noncurrent-Carrying Wiring Device Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: ILD059453373
EPA Region: 5
Area Name: ENTIRE FACILITY
Actual Date: 20160622
Action: CA750YE - Migration of Contaminated Groundwater under Control, Yes, Migration of Contaminated Groundwater Under Control has been verified
NAICS Code(s): 335932

MIDWEST ELECTRIC MFG CORP (Continued) **1000436551**

Noncurrent-Carrying Wiring Device Manufacturing
Original schedule date: 20160622
Schedule end date: Not reported

LUST:

Incident Num:	930039
IL EPA Id:	316080001
Product:	Diesel, Fuel Oil
IEMA Date:	1993-01-05
Project Manager:	Wallace
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Midwest Electric
PRP Contact:	Stephen Liedtke
PRP Address:	1639 West Walnut St.
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1993-01-25
45 Report Received:	1993-04-30
NFA/NFR Letter:	**1994-02-15**
NFR Date Recorded:	Not reported

ENGINEERING CONTROLS:

Illinois Epa Id:	0316080001
NFR Letter:	10/07/1999
Date NFR Recorded:	10/19/1999
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Nelson Olavarria
RA Company:	Cooper Industries
RA Address:	600 Travis Street
RA City,St,Zip:	Houston, TX 77002-1001
Worker Caution:	Yes
Acres:	0.01
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316080001
NFR Letter:	10/07/1999
Date NFR Recorded:	10/19/1999
Comprehensive / Focused:	Focused

MIDWEST ELECTRIC MFG CORP (Continued) **1000436551**

Remediation Applicant Name:	Nelson Olavarria
RA Company:	Cooper Industries
RA Address:	600 Travis Street
RA City,St,Zip:	Houston, TX 77002-1001
Worker Caution:	Yes
Acres:	0.01
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316080001
US EPA Id:	ILD059453373
Longitude:	-87.668316
Latitude:	41.885753
Contact Name:	Nelson Alavarria
Contact Address:	1001 Fannin Street
Contact City,St,Zip:	Houston 77002-1001
Date Enrolled:	03/10/1997
Point Of Contact:	Jennifer J. Johanson
Consultant Company:	HSI Geotrans
Consultant Address:	175 North Corporate Drive
Consultant City,St,Zip:	Brookfield 53046
Proj Mgr Assigned:	Not assigned
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Cooper Industries

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Nelson Olavarria
Remediation Applicant Company:	Cooper Industries
Remediation Applicant Address:	600 Travis Street
Remediation Applicant City,St,Zip:	Houston, TX 77002-1001

MIDWEST ELECTRIC MFG CORP (Continued) **1000436551**

Illinois EPA:	0316080001
Site Name:	Midwest Electric
NFR Letter:	1999-10-07
NFR Letter Date Recorded:	1999-10-19
Comprehensive/Focused:	Focused
Worker Caution:	Y
Acres:	0.01

RCRA NonGen / NLR:

Date form received by agency:	11/18/1980
Facility name:	MIDWEST ELECTRIC MFG CORP
Facility address:	1639 W WALNUT CHICAGO, IL 60612
EPA ID:	ILD059453373
Contact:	CHARLES AUBUCHON
Contact address:	1639 W WALNUT CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-738-6800
Contact email:	Not reported
EPA Region:	05
Land type:	Private
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CROUSE HINDS COMPANY
Owner/operator address:	WOLF AND 7TH N ST SYRACUSE, NY 13221
Owner/operator country:	Not reported
Owner/operator telephone:	315-477-7000
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Owner/operator name:	CROUSE-HINDS COMPANY
Owner/operator address:	WOLF & 7TH NORTH STREETS CITY NOT REPORTED, NY 99998
Owner/operator country:	Not reported
Owner/operator telephone:	315-477-7000
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No

MIDWEST ELECTRIC MFG CORP (Continued) **1000436551**

Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	Yes
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code: D002
. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

Historical Generators:
Date form received by agency: 08/18/1980
Site name: MIDWEST ELECTRIC MFG CORP
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D002
. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLOROETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE, AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Corrective Action Summary:
Event date: 09/14/1992
Event: CA PRIORITIZATION-LOW CA PRIORITY

Event date: 09/10/2013
Event: REMEDY CONSTRUCTION-REMEDY CONSTRUCTED

MIDWEST ELECTRIC MFG CORP (Continued) **1000436551**

Event date: 09/10/2013
Event: HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE

Event date: 06/22/2016
Event: RELEASE TO GW CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE

Event date: 07/15/2016
Event: CA PERFORMANCE STANDARDS ATTAINED - CONTROLS REQUIRED

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 05/29/1998
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/22/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/16/1995
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/19/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/17/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/18/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/16/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

2020 COR ACTION:
EPA ID: ILD059453373

MIDWEST ELECTRIC MFG CORP (Continued) **1000436551**

Region: 5
Action: Not reported

AM170 **STOCK YARDS PACKING COMPANY, INC.** **ENG CONTROLS** **S104562056**
WNW **340 NORTH OAKLEY BOULEVARD** **INST CONTROL** **N/A**
1/4-1/2 **CHICAGO, IL 60612** **SRP**
0.427 mi.
2256 ft. **Site 2 of 2 in cluster AM**

Relative: Higher

Actual: 599 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275185
NFR Letter:	07/23/2004
Date NFR Recorded:	09/20/2004
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Matthew Pollack
RA Company:	Not reported
RA Address:	1131 Linden Road
RA City,St,Zip:	Deerfield, IL 60015
Worker Caution:	Yes
Acres:	0.358
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275185
NFR Letter:	07/23/2004
Date NFR Recorded:	09/20/2004
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Matthew Pollack
RA Company:	Not reported
RA Address:	1131 Linden Road
RA City,St,Zip:	Deerfield, IL 60015
Worker Caution:	Yes
Acres:	0.358
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No

STOCK YARDS PACKING COMPANY, INC. (Continued) **S104562056**

Alternate Barrier: No

SRP:

IL EPA Id:	0316275185
US EPA Id:	Not reported
Longitude:	-87.685052
Latitude:	41.887481
Contact Name:	Matthew Pollack
Contact Address:	340 North Oakley Boulevard
Contact City,St,Zip:	Chicago 60612
Date Enrolled:	06/05/2000
Point Of Contact:	Steven J. Wanner
Consultant Company:	Conestoga-Rovers & Associates, Inc.
Consultant Address:	8615 West Bryn Mawr Avenue
Consultant City,St,Zip:	Chicago 60631
Proj Mgr Assigned:	Not assigned
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Stock Yards Packing Company, Inc.

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	Yes
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Matthew Pollack
Remediation Applicant Company:	Not reported
Remediation Applicant Address:	1131 Linden Road
Remediation Applicant City,St,Zip:	Deerfield, IL 60015
Illinois EPA:	0316275185
Site Name:	Stock Yards Packing Company, Inc.
NFR Letter:	2004-07-23
NFR Letter Date Recorded:	2004-09-20
Comprehensive/Focused:	Focused
Worker Caution:	Y
Acres:	0.358

AN171 **MALCOLM X PARKING LOT** **LUST** **S116623175**
South **1907-1909 WEST ADAMS STREET** **N/A**
1/4-1/2 **CHICAGO, IL 60612**
0.438 mi.
2313 ft. **Site 1 of 2 in cluster AN**

Relative: **Lower**
Actual: **591 ft.**

LUST:

Incident Num:	20140385
IL EPA Id:	316275364
Product:	Other Petroleum
IEMA Date:	2014-04-09
Project Manager:	Putrich
Project Manager Phone:	(217) 524-4827
Email:	Steve.Putrich@illinois.gov
PRP Name:	City Colleges of Chicago
PRP Contact:	Michael A. Emerson
PRP Address:	226 West Jackson Boulevard
PRP City,St,Zip:	Chicago, IL 60606
PRP Phone:	3125533299
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	2014-04-29
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

AO172 **GAYNES TESTING LABORATORIES** **ENG CONTROLS** **S104780076**
ENE **1642 WEST FULTON STREET** **INST CONTROL** **N/A**
1/4-1/2 **CHICAGO, IL 60612** **SRP**
0.440 mi.
2323 ft. **Site 1 of 2 in cluster AO**

Relative: **Higher**
Actual: **599 ft.**

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275110
NFR Letter:	06/28/2001
Date NFR Recorded:	08/21/2001
Comprehensive / Focused:	Focused
Remediation Applicant Name:	William Sheffield
RA Company:	Ashland Addison Florist Company
RA Address:	1640 West Fulton Street
RA City,St,Zip:	Chicago, IL 60612
Worker Caution:	No
Acres:	0.24
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	Yes
Alternate Barrier:	No

GAYNES TESTING LABORATORIES (Continued) **S104780076**

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275110
NFR Letter:	06/28/2001
Date NFR Recorded:	08/21/2001
Comprehensive / Focused:	Focused
Remediation Applicant Name:	William Sheffield
RA Company:	Ashland Addison Florist Company
RA Address:	1640 West Fulton Street
RA City,St,Zip:	Chicago, IL 60612
Worker Caution:	No
Acres:	0.24
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	Yes
Alternate Barrier:	No

SRP:

IL EPA Id:	0316275110
US EPA Id:	Not reported
Longitude:	-87.669032
Latitude:	41.887287
Contact Name:	William Sheffield
Contact Address:	1640 West Fulton Street
Contact City,St,Zip:	Chicago 60612
Date Enrolled:	09/11/2000
Point Of Contact:	Michael R. Duet, P.E.
Consultant Company:	Carnow, Conibear & Associates, Ltd.
Consultant Address:	600 West Van Buren Street
Consultant City,St,Zip:	Chicago 60607
Proj Mgr Assigned:	Not assigned
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	Ashland Addison Florist Company

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	No
BCT:	No
Building Slab:	No
Asphalt Used:	No
Concrete Used:	No
Clean Soil 3ft:	No
Clean Soil 10ft:	Yes

GAYNES TESTING LABORATORIES (Continued) **S104780076**

Alternate Barrier:	No
Remediation Applicant Name:	William Sheffield
Remediation Applicant Company:	Ashland Addison Florist Company
Remediation Applicant Address:	1640 West Fulton Street
Remediation Applicant City,St,Zip:	Chicago, IL 60612
Illinois EPA:	0316275110
Site Name:	Gaynes Testing laboratories
NFR Letter:	2001-06-28
NFR Letter Date Recorded:	2001-08-21
Comprehensive/Focused:	Focused
Worker Caution:	N
Acres:	0.24

AO173 **GAYNES, CHESTER** **LUST** **S104521905**
ENE **1642-1652 WEST FULTON** **N/A**
1/4-1/2 **CHICAGO, IL 60612**
0.440 mi.
2323 ft. **Site 2 of 2 in cluster AO**

Relative: **Higher**

Actual: **599 ft.**

LUST:

Incident Num:	961602
IL EPA Id:	316275110
Product:	Other Petroleum
IEMA Date:	1996-09-03
Project Manager:	Harlow
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Chester Gaynes
PRP Contact:	Not reported
PRP Address:	420 East Ohio St., Apt. 9F
PRP City,St,Zip:	Chicago, IL 60611
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	1997-01-08
Non LUST Determination Letter:	Not reported
20 Report Received:	1996-09-27
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

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174 **CHICAGO MAILING TUBE** **LUST** **S104522671**
ENE **1658 CARROLL AVE** **BOL** **N/A**
1/4-1/2 **CHICAGO, IL 60612**
0.444 mi.
2345 ft.

Relative: **Higher**

Actual: **600 ft.**

LUST:

Incident Num:	950396
IL EPA Id:	316286307
Product:	Other Petroleum
IEMA Date:	1995-02-23
Project Manager:	Nickell
Project Manager Phone:	Not reported
Email:	Not reported

CHICAGO MAILING TUBE (Continued) **S104522671**

PRP Name:	Chicago Mailing Tube Co.
PRP Contact:	James Meany
PRP Address:	400 North Leavitt St.
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1995-03-20
45 Report Received:	1995-04-11
NFA/NFR Letter:	**1995-06-01**
NFR Date Recorded:	Not reported

BOL:

Site Id:	170000212712
Inv Num:	0316286307
Interest Name:	Chicago Mailing Tube
Interest Type:	BOL
Media Code:	LAND

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175 NW 1/4-1/2 0.447 mi. 2359 ft.

MARCO LIGHTING CO
457 N LEAVITT
CHICAGO, IL 60612

RCRA-SQG LUST FINDS ECHO **1000614165 ILD984844753**

Relative: Higher

Actual: 599 ft.

RCRA-SQG:

Date form received by agency:	11/08/1991
Facility name:	MARCO LIGHTING CO
Facility address:	457 N LEAVITT CHICAGO, IL 60612
EPA ID:	ILD984844753
Contact:	MARIO SALAMONE
Contact address:	457 N LEAVITT CHICAGO, IL 60612
Contact country:	US
Contact telephone:	312-829-6900
Contact email:	Not reported
EPA Region:	05
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	SALAMONE MARIO
Owner/operator address:	457 N LEAVITT ST CHICAGO, IL 60612
Owner/operator country:	Not reported
Owner/operator telephone:	312-829-6900
Owner/operator email:	Not reported
Owner/operator fax:	Not reported
Owner/operator extension:	Not reported
Legal status:	Private

MARCO LIGHTING CO (Continued) **1000614165**

Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

Violation Status: No violations found

LUST:
Incident Num: 920610
IL EPA Id: 316275052
Product: Fuel Oil
IEMA Date: 1992-03-05
Project Manager: Greenberg
Project Manager Phone: Not reported
Email: Not reported
PRP Name: Marco Lighting Component
PRP Contact: Mario Salamone
PRP Address: 457 North Leavitt
PRP City,St,Zip: Chicago, IL 60612
PRP Phone: Not reported
Site Classification: Not reported
Section 57.5(g) Letter: 731
Date Section 57.5(g) Letter: Not reported
Non LUST Determination Letter: Not reported
20 Report Received: 1992-04-30
45 Report Received: 1992-08-12
NFA/NFR Letter: 1996-05-31
NFR Date Recorded: Not reported

FINDS:

Registry ID: 110009379449

MARCO LIGHTING CO (Continued) **1000614165**

Environmental Interest/Information System

ACES (Illinois - Agency Compliance And Enforcement System) is the Illinois EPA Project to facilitate the permitting operations

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid:	1000614165
Registry ID:	110009379449
DFR URL:	http://echo.epa.gov/detailed-facility-report?fid=110009379449

176
WNW
1/4-1/2
0.448 mi.
2364 ft.

LAKE CITY CORES, INC. **LUST** **S113808785**
2324 WEST FULTON STREET **N/A**
CHICAGO, IL 60612

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	20130738
IL EPA Id:	316275356
Product:	Other Petroleum
IEMA Date:	2013-06-27
Project Manager:	Jones
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Lake City Cores, Inc.
PRP Contact:	James Hartman
PRP Address:	1523 West Hubbard Street
PRP City,St,Zip:	Chicago, IL 60642
PRP Phone:	3124217233
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2013-08-12
45 Report Received:	2013-09-10
NFA/NFR Letter:	**2013-10-09**
NFR Date Recorded:	2013-10-30

177
West
1/4-1/2
0.448 mi.
2366 ft.

BARCLAY MARINE DISTRIBUTOR
2332 WEST WALNUT
CHICAGO, IL 60612

LUST **S104530125**
N/A

Relative:
Higher

Actual:
598 ft.

LUST:

Incident Num:	992330
IL EPA Id:	316275177
Product:	Gasoline
IEMA Date:	1999-10-14
Project Manager:	Rahman
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Barclay Marine Distributor
PRP Contact:	Oscar Davila
PRP Address:	2323 West Fulton St.
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	3128290500
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1999-11-04
45 Report Received:	2000-05-03
NFA/NFR Letter:	**2000-08-23**
NFR Date Recorded:	2000-10-02

178
ESE
1/4-1/2
0.455 mi.
2402 ft.

MCCRORY SENIOR APARTMENTS, LLC
1637-1659 WEST WASHINGTON BLVD.
CHICAGO, IL 60612

SRP **S119026449**
N/A

Relative:
Lower

Actual:
596 ft.

SRP:

IL EPA Id:	0316275380
US EPA Id:	Not reported
Longitude:	-87.668923
Latitude:	41.883031
Contact Name:	Richard Sciortino
Contact Address:	666 Dundee Road
Contact City,St,Zip:	Northbrook 60062-2735
Date Enrolled:	11/17/2016
Point Of Contact:	Megan Wells-Paske
Consultant Company:	Pioneer Engineering & Environmental Services, LLC
Consultant Address:	700 North Sacramento Boulevard
Consultant City,St,Zip:	Chicago 60612
Proj Mgr Assigned:	Jeff Guy
Sec. 4 Letter Date:	Not reported
Active:	Yes
Remediation Applicant Co:	McCrory Senior Apartments, LLC

AN179 **CITY COLLEGES OF CHICAGO** **LUST** **S115487313**
South **216 SOUTH WINCHESTER** **N/A**
1/4-1/2 **CHICAGO, IL 60612**
0.459 mi.
2424 ft. **Site 2 of 2 in cluster AN**

Relative: LUST:
Lower

Actual: Incident Num:	20131200
590 ft. IL EPA Id:	316275359
Product:	Other Petroleum
IEMA Date:	2013-11-05
Project Manager:	Not reported
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	City Colleges of Chicago
PRP Contact:	Michael A. Emerson
PRP Address:	226 West Jackson Boulevard
PRP City,St,Zip:	Chicago, IL 60606
PRP Phone:	3125533299
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	2014-03-07
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

AP180 **CHICAGO, CITY OF** **LUST** **S105225857**
WSW **2324 WEST MADISON** **N/A**
1/4-1/2 **CHICAGO, IL 60612**
0.465 mi.
2453 ft. **Site 1 of 3 in cluster AP**

Relative: LUST:
Lower

Actual: Incident Num:	991520
594 ft. IL EPA Id:	316275175
Product:	Other Petroleum
IEMA Date:	1999-06-23
Project Manager:	Friedel
Project Manager Phone:	(217) 785-5736
Email:	Melinda.Friedel@illinois.gov
PRP Name:	City of Chicago
PRP Contact:	Erin Keane
PRP Address:	Dept. of Environment, 30 North LaSalle, 25th Fl.
PRP City,St,Zip:	Chicago, IL 60602
PRP Phone:	3127445918
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1999-07-13
45 Report Received:	1999-08-06
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

181
North
1/4-1/2
0.465 mi.
2455 ft.

JODI DEVELOPMENT
2010 WEST RACE AVENUE
CHICAGO, IL 60612

LUST **S106526949**
N/A

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	20040814
IL EPA Id:	316275245
Product:	Gasoline
IEMA Date:	2004-06-07
Project Manager:	South
Project Manager Phone:	(217) 558-0347
Email:	Shirlene.South@illinois.gov
PRP Name:	Jodi Development
PRP Contact:	John Searls
PRP Address:	1515 North Hudson, Unit 1N
PRP City,St,Zip:	Chicago, IL 60610
PRP Phone:	6303274614
Site Classification:	Not reported
Section 57.5(g) Letter:	Not reported
Date Section 57.5(g) Letter:	2004-11-01
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

AP182
WSW
1/4-1/2
0.467 mi.
2464 ft.

CHICAGO, CITY OF
2320 WEST MADISON
CHICAGO, IL 60612

Site 2 of 3 in cluster AP

LUST **S105225781**
N/A

Relative:
Lower

Actual:
594 ft.

LUST:

Incident Num:	940617
IL EPA Id:	316286265
Product:	Fuel Oil
IEMA Date:	1994-03-23
Project Manager:	Reuter
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	City of Chicago
PRP Contact:	Not reported
PRP Address:	320 North Clark St.
PRP City,St,Zip:	Chicago, IL 60610
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1994-10-11
45 Report Received:	1994-10-11
NFA/NFR Letter:	**1994-12-06**
NFR Date Recorded:	Not reported

AP183 **CHICAGO, CITY OF DEPT. OF ENVIRONMENT** **LUST** **S105815318**
WSW **2316 WEST MADISON** **N/A**
1/4-1/2 **CHICAGO, IL 60612**
0.469 mi.
2475 ft. **Site 3 of 3 in cluster AP**

Relative:
Lower

Actual:
594 ft.

LUST:

Incident Num:	20010552
IL EPA Id:	316275196
Product:	Other Petroleum
IEMA Date:	2001-04-02
Project Manager:	Rossi
Project Manager Phone:	(217) 782-9285
Email:	Jenny.Rossi@illinois.gov
PRP Name:	City of Chicago
PRP Contact:	Erin Keane
PRP Address:	30 North LaSalle, 25th Fl.
PRP City,St,Zip:	Chicago, IL 60602
PRP Phone:	3127445918
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2001-04-13
45 Report Received:	2001-05-18
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	20010553
IL EPA Id:	316275196
Product:	Other Petroleum
IEMA Date:	2001-04-02
Project Manager:	Rossi
Project Manager Phone:	(217) 782-9285
Email:	Jenny.Rossi@illinois.gov
PRP Name:	City of Chicago
PRP Contact:	Erin Keane
PRP Address:	30 North LaSalle, 25th Fl.
PRP City,St,Zip:	Chicago, IL 60602
PRP Phone:	3127445918
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	2001-09-25
Non LUST Determination Letter:	Not reported
20 Report Received:	2001-04-13
45 Report Received:	2001-06-18
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

Incident Num:	20010738
IL EPA Id:	316275196
Product:	Other Petroleum
IEMA Date:	2001-04-27
Project Manager:	Rossi
Project Manager Phone:	(217) 782-9285
Email:	Jenny.Rossi@illinois.gov
PRP Name:	City of Chicago
PRP Contact:	Erin Keane
PRP Address:	30 North LaSalle

CHICAGO, CITY OF DEPT. OF ENVIRONMENT (Continued) **S105815318**

PRP City,St,Zip:	Chicago, IL 60602
PRP Phone:	3127445918
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2001-05-18
45 Report Received:	2001-06-18
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

184
ENE
1/4-1/2
0.477 mi.
2517 ft.

PEPPERCORN CAPITOL LLC **LUST** **S112351882**
240 NORTH ASHLAND **N/A**
CHICAGO, IL 60607

Relative:
Higher

Actual:
598 ft.

LUST:

Incident Num:	20121187
IL EPA Id:	316005306
Product:	Other Petroleum
IEMA Date:	2012-11-13
Project Manager:	Putrich
Project Manager Phone:	(217) 524-4827
Email:	Steve.Putrich@illinois.gov
PRP Name:	Peppercorn Capitol LLC
PRP Contact:	Phillip Denny
PRP Address:	1 North Wacker Street, Suite #4125
PRP City,St,Zip:	Chicago, IL 60606
PRP Phone:	3123888777
Site Classification:	Not reported
Section 57.5(g) Letter:	734
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	2012-12-14
45 Report Received:	2013-02-19
NFA/NFR Letter:	**2013-03-27**
NFR Date Recorded:	2013-06-28

185
NE
1/4-1/2
0.481 mi.
2540 ft.

ASHTRON IND. **LUST** **S104523301**
1650 WEST KINZIE **N/A**
CHICAGO, IL 60622

Relative:
Higher

Actual:
600 ft.

LUST:

Incident Num:	940569
IL EPA Id:	316246180
Product:	Other Petroleum
IEMA Date:	1994-03-18
Project Manager:	Heaton
Project Manager Phone:	(217) 524-3312
Email:	Mike.Heaton@illinois.gov
PRP Name:	Ashtron Ind.
PRP Contact:	Charles Savage
PRP Address:	1650 West Kinzie

ASHTRON IND. (Continued) **S104523301**

PRP City,St,Zip:	Chicago, IL 60622
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	2013-03-26
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

AQ186 **1747 WEST GRAND CORPORATION** **ENG CONTROLS** **S114850839**
NE **1747 WEST GRAND AVENUE** **INST CONTROL** **N/A**
1/4-1/2 **CHICAGO, IL 60622** **SRP**
0.482 mi.
2543 ft. **Site 1 of 2 in cluster AQ**

Relative:
Higher

Actual:
599 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316246430
NFR Letter:	03/30/2015
Date NFR Recorded:	05/15/2015
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Gregory Hanusiak
RA Company:	1747 West Grand Corporation
RA Address:	7488 North Osceola Avenue
RA City,St,Zip:	Chicago, IL 60631
Worker Caution:	Yes
Acres:	0.26
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316246430
NFR Letter:	03/30/2015
Date NFR Recorded:	05/15/2015
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Gregory Hanusiak
RA Company:	1747 West Grand Corporation
RA Address:	7488 North Osceola Avenue
RA City,St,Zip:	Chicago, IL 60631
Worker Caution:	Yes
Acres:	0.26
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority Agreement:	No
Ordinance:	Yes

1747 WEST GRAND CORPORATION (Continued) **S114850839**

Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316246430
US EPA Id:	Not reported
Longitude:	-87.671269
Latitude:	41.890711
Contact Name:	Gregory Hanusiak
Contact Address:	7488 North Osceola Avenue
Contact City,St,Zip:	Chicago 60631
Date Enrolled:	11/04/2013
Point Of Contact:	Robert A. Johnson
Consultant Company:	Environmental Consulting group, Inc.
Consultant Address:	411 South Wells Street
Consultant City,St,Zip:	Chicago 60607
Proj Mgr Assigned:	Rhett Rossi
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	1747 West Grand Corporation

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	No
Highway Authority A greement:	No
Ordinance:	Yes
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	No
Building Slab:	Yes
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Gregory Hanusiak
Remediation Applicant Company:	1747 West Grand Corporation
Remediation Applicant Address:	7488 North Osceola Avenue
Remediation Applicant City,St,Zip:	Chicago, IL 60631
Illinois EPA:	0316246430
Site Name:	1747 West Grand Corporation
NFR Letter:	2015-03-30
NFR Letter Date Recorded:	2015-05-15
Comprehensive/Focused:	Focused
Worker Caution:	Y
Acres:	0.26

AQ187 **1751-1759 WEST GRAND AVENUE, LLC** **SRP** **S108187545**
NNE **1751-1759 WEST GRAND AVENUE** **N/A**
1/4-1/2 **CHICAGO, IL 60622**
0.483 mi.
2551 ft. **Site 2 of 2 in cluster AQ**

Relative:
Higher

Actual:
599 ft.

SRP:

IL EPA Id:	0316575075
US EPA Id:	Not reported
Longitude:	-87.671721
Latitude:	41.890696
Contact Name:	Charles Corry
Contact Address:	1751-1759 West Grand Avenue
Contact City,St,Zip:	Chicago 60622
Date Enrolled:	09/25/2006
Point Of Contact:	Aaron T. Colin
Consultant Company:	K-Plus Environmental Services
Consultant Address:	600 West Van Buren Street
Consultant City,St,Zip:	Chicago 60607
Proj Mgr Assigned:	Tim Murphy
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	1751-1759 West Grand Avenue, LLC

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188 **ACCESSORIES PLUS** **ENG CONTROLS** **S113269948**
ENE **1641 WEST CARROLL AVENUE** **INST CONTROL** **N/A**
1/4-1/2 **CHICAGO, IL 60612** **SRP**
0.486 mi. **BOL**
2565 ft.

Relative:
Higher

Actual:
599 ft.

ENGINEERING CONTROLS:

Illinois Epa Id:	0316275257
NFR Letter:	11/06/2015
Date NFR Recorded:	11/17/2015
Comprehensive / Focused:	Focused
Remediation Applicant Name:	Paul Friemel
RA Company:	TPM Properties
RA Address:	1641 West Carroll Avenue
RA City,St,Zip:	Chicago, IL 60612
Worker Caution:	Yes
Acres:	0.26
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	Yes
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

IL INSTUTIONAL CONTROL:

Illinois EPA Id:	0316275257
NFR Letter:	11/06/2015
Date NFR Recorded:	11/17/2015

ACCESSORIES PLUS (Continued) **S113269948**

Comprehensive / Focused:	Focused
Remediation Applicant Name:	Paul Friemel
RA Company:	TPM Properties
RA Address:	1641 West Carroll Avenue
RA City,St,Zip:	Chicago, IL 60612
Worker Caution:	Yes
Acres:	0.26
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority Agreement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	Yes
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No

SRP:

IL EPA Id:	0316275257
US EPA Id:	Not reported
Longitude:	-87.668763
Latitude:	41.887546
Contact Name:	Paul Friemel
Contact Address:	1641 West Carroll Avenue
Contact City,St,Zip:	Chicago 60612
Date Enrolled:	05/19/2014
Point Of Contact:	Nicholas J. Cuzzone, P.E.
Consultant Company:	EPS Environmental Services, Inc.
Consultant Address:	7237 West Devon Avenue
Consultant City,St,Zip:	Chicago 60631
Proj Mgr Assigned:	James Baldwin
Sec. 4 Letter Date:	Not reported
Active:	No
Remediation Applicant Co:	TPM Properties

NFRDL:

Effective:	True
Land Use:	Industrial/Commercial
Ground Water Use Restriction:	Yes
Highway Authority A greement:	No
Ordinance:	No
Industrial - Commercial:	Yes
Slab on Grade:	Yes
BCT:	Yes
Building Slab:	No
Asphalt Used:	No
Concrete Used:	Yes
Clean Soil 3ft:	No
Clean Soil 10ft:	No
Alternate Barrier:	No
Remediation Applicant Name:	Paul Friemel
Remediation Applicant Company:	TPM Properties
Remediation Applicant Address:	1641 West Carroll Avenue

ACCESSORIES PLUS (Continued) **S113269948**

Remediation Applicant City,St,Zip:	Chicago, IL 60612
Illinois EPA:	0316275257
Site Name:	Accessories Plus
NFR Letter:	2015-11-06
NFR Letter Date Recorded:	2015-11-17
Comprehensive/Focused:	Focused
Worker Caution:	Y
Acres:	0.26

BOL:

Site Id:	170001592809
Inv Num:	0316275257
Interest Name:	Accessories Plus
Interest Type:	BOL
Media Code:	LAND

189
NW
1/4-1/2
0.486 mi.
2566 ft.

UNITED AMERICAN AIRLINES **LUST** **1002885688**
2246 WEST HUBBARD **N/A**
CHICAGO, IL 60612

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	20010973
IL EPA Id:	316275197
Product:	Other Petroleum
IEMA Date:	2001-06-06
Project Manager:	Zuehlke
Project Manager Phone:	(217) 557-6937
Email:	Wayne.Zuehlke@illinois.gov
PRP Name:	United American Airlines
PRP Contact:	William Renotti
PRP Address:	2246 West Hubbard
PRP City,St,Zip:	Chicago, IL 60612
PRP Phone:	3127336700
Site Classification:	Not reported
Section 57.5(g) Letter:	732
Date Section 57.5(g) Letter:	2001-10-01
Non LUST Determination Letter:	Not reported
20 Report Received:	Not reported
45 Report Received:	Not reported
NFA/NFR Letter:	**Not reported**
NFR Date Recorded:	Not reported

190
NE
1/4-1/2
0.491 mi.
2595 ft.

INSULATED PANEL CO. **LUST** **S104002265**
421 PAULINA ST. **N/A**
CHICAGO, IL 60622

Relative:
Higher

Actual:
599 ft.

LUST:

Incident Num:	921147
IL EPA Id:	316245128
Product:	Fuel Oil
IEMA Date:	1992-04-30

INSULATED PANEL CO. (Continued) **S104002265**

Project Manager:	NOT ASSIGNED
Project Manager Phone:	Not reported
Email:	Not reported
PRP Name:	Insulated Panel Co.
PRP Contact:	Bob Deppen
PRP Address:	421 Paulina St.
PRP City,St,Zip:	Chicago, IL 60622
PRP Phone:	Not reported
Site Classification:	Not reported
Section 57.5(g) Letter:	731
Date Section 57.5(g) Letter:	Not reported
Non LUST Determination Letter:	Not reported
20 Report Received:	1992-05-22
45 Report Received:	1992-07-30
NFA/NFR Letter:	**1992-09-10**
NFR Date Recorded:	Not reported

191
ENE
1/2-1
0.806 mi.
4258 ft.

ADVANCED PROCESS SUPPLY CO. **SSU** **S103427979**
400 NORTH NOBLE STREET **N/A**
CHICAGO, IL 60622

Relative: Higher

Actual: 598 ft.

SSU:

Facility ID:	0316005411
Facility Type:	Manufacturer - Industrial
Directions:	Take I-55 North.
Region:	Des Plaines
Current Program:	SSU
Project Manager:	Holy
Community Relations:	Not reported
SSU Status:	Backlog
FOS:	Finley
Year Completed:	1994
Site Size:	16
Lat/Long:	41.8890686 / -87.662399

192
SSE
1/2-1
0.929 mi.
4903 ft.

UNIVERSITY OF ILLINOIS MEDICAL CENTER **CORRACTS** **1000431449**
715 S WOOD ST **RCRA NonGen / NLR** **ILD074400946**
CHICAGO, IL 60612

Relative: Lower

Actual: 593 ft.

CORRACTS:

EPA ID:	ILD074400946
EPA Region:	5
Area Name:	ENTIRE FACILITY
Actual Date:	19940331
Action:	CA075LO - CA Prioritization, Facility or area was assigned a low corrective action priority
NAICS Code(s):	Not reported
Original schedule date:	Not reported
Schedule end date:	Not reported

UNIVERSITY OF ILLINOIS MEDICAL CENTER (Continued) **1000431449**

RCRA NonGen / NLR:
Date form received by agency: 03/01/1992
Facility name: UNIVERSITY OF ILLINOIS MEDICAL CENTER
Site name: UNIVERSITY OF ILLINOIS
Facility address: 1110 S PAULINA ST
CHICAGO, IL 60612
EPA ID: ILD074400946
Mailing address: 715 S WOOD ST MC645
CHICAGO, IL 60612
Contact: CHARLES RIZZO
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: 312-413-2436
Contact email: Not reported
EPA Region: 05
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/28/1990
Site name: UNIVERSITY OF ILLINOIS
Classification: Large Quantity Generator

Date form received by agency: 07/11/1989
Site name: UNIVERSITY OF ILLINOIS MEDICAL CENTER
Classification: Not a generator, verified

Date form received by agency: 08/18/1980
Site name: UNIVERSITY OF ILLINOIS MEDICAL CENTER
Classification: Not a generator, verified

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE

UNIVERSITY OF ILLINOIS MEDICAL CENTER (Continued) **1000431449**

FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.

. Waste code: D002
. Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

. Waste code: D003
. Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.

Corrective Action Summary:
Event date: 03/31/1994
Event: CA PRIORITIZATION-LOW CA PRIORITY

Violation Status: No violations found

Count: 4 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CHICAGO	S106781170	SOGO PARTNERS LLC	1463 & 1465 WEST HUBBARD	60622	LUST
CHICAGO	1003872928	GOSS PRINTING	16TH AND PAULINA	60622	SEMS-ARCHIVE
CHICAGO	S118455679	832 W FULTON, LLC	832-856 WEST FULTON MARKET STR	60607	LUST
CHICAGO	1003872926	UNITED LEAD CO.	INTERSECTION WASHINGTON & LEXI	60607	SEMS-ARCHIVE

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 05/13/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 23

Source: EPA
Telephone: N/A
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 05/13/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 23

Source: EPA
Telephone: N/A
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 05/13/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 23

Source: EPA
Telephone: N/A
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 05/18/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 23

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 05/18/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 23

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/16/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 78

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 05/09/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 02/13/2018
Date Data Arrived at EDR: 02/27/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 73

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 05/29/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 73

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/27/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

SSU: State Sites Unit Listing

The State Response Action Program database identifies the status of all sites under the responsibility of the Illinois EPA's State Sites Unit.

Date of Government Version: 05/02/2018
Date Data Arrived at EDR: 05/02/2018
Date Made Active in Reports: 05/10/2018
Number of Days to Update: 8

Source: Illinois Environmental Protection Agency
Telephone: 217-524-4826
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

State and tribal landfill and/or solid waste disposal site lists

LF WMRC: Waste Management & Research Center Landfill Database

The Waste Management & Research Center Landfill Database includes records from the Department of Public Health, Department of Mines & Minerals, Illinois Environmental Protection Agency, State Geological Survey, Northeastern Illinois Planning Commission and Pollution Control Board.

Date of Government Version: 12/31/2001
Date Data Arrived at EDR: 10/06/2006
Date Made Active in Reports: 11/06/2006
Number of Days to Update: 31

Source: Department of Natural Resources
Telephone: 217-333-8940
Last EDR Contact: 09/18/2009
Next Scheduled EDR Contact: 12/28/2009
Data Release Frequency: No Update Planned

CCDD: Clean Construction or Demolition Debris

Construction and demolition (C and D) debris is nonhazardous, uncontaminated material resulting from construction, remodeling, repair, or demolition of utilities, structures, and roads.

Date of Government Version: 04/11/2018
Date Data Arrived at EDR: 05/01/2018
Date Made Active in Reports: 05/30/2018
Number of Days to Update: 29

Source: Illinois EPA
Telephone: 217-524-3300
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

SWF/LF: Available Disposal for Solid Waste in Illinois - Solid Waste Landfills Subject to State Surcharge

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 08/03/2017
Date Made Active in Reports: 09/19/2017
Number of Days to Update: 47

Source: Illinois Environmental Protection Agency
Telephone: 217-785-8604
Last EDR Contact: 04/26/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Annually

LF SPECIAL WASTE: Special Waste Site List

These landfills, as of January 1, 1990, accept non-hazardous special waste pursuant to the Illinois EPA Non-Hazardous Special Waste Definition. List A includes landfills that may receive any non-hazardous waste, Non-Regional Pollution Control Facilities are so noted. List B includes landfills designed to receive specific non-hazardous wastes. List B landfills are designated as a Regional Pollution Control Facility by RPCF, or Non-Regional Pollution Control Facility by Non-RPCF.

Date of Government Version: 01/01/1990
Date Data Arrived at EDR: 06/17/2009
Date Made Active in Reports: 07/15/2009
Number of Days to Update: 28

Source: Illinois EPA
Telephone: 217-782-9288
Last EDR Contact: 06/10/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

IL NIPC: Solid Waste Landfill Inventory

Solid Waste Landfill Inventory. NIPC is an inventory of active and inactive solid waste disposal sites, based on state, local government and historical archive data. Included are numerous sites which previously had never been identified largely because there was no obligation to register such sites prior to 1971.

Date of Government Version: 08/01/1988
Date Data Arrived at EDR: 08/01/1994
Date Made Active in Reports: 08/12/1994
Number of Days to Update: 11

Source: Northeastern Illinois Planning Commission
Telephone: 312-454-0400
Last EDR Contact: 05/23/2006
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

State and tribal leaking storage tank lists

LUST: Leaking Underground Storage Tank Sites

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 05/22/2018
Number of Days to Update: 28

Source: Illinois Environmental Protection Agency
Telephone: 217-524-3300
Last EDR Contact: 04/24/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 01/06/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

LUST TRUST: Underground Storage Tank Fund Payment Prioirty List
In case sufficient funds are not available in the Underground Storage Tank Fund, requests for payment are entered on the Payment Priority List by "queue date" order. As required by the Environmental Protection Act, the queue date is the date that a complete request for partial or final payment was received by the Agency. The queue date is "officially" confirmed at the end of the payment review process when a Final Decision Letter is sent to the site owner.

Date of Government Version: 06/06/2016
Date Data Arrived at EDR: 07/27/2016
Date Made Active in Reports: 10/18/2016
Number of Days to Update: 83
Source: Illinois EPA
Telephone: 217-782-6762
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

State and tribal registered storage tank lists

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

UST: Underground Storage Tank Facility List

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 05/10/2018
Number of Days to Update: 16

Source: Illinois State Fire Marshal
Telephone: 217-785-0969
Last EDR Contact: 04/24/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Quarterly

AST: Above Ground Storage Tanks

Listing of all aboveground tanks inspected by Office of State Fire Marshal.

Date of Government Version: 01/02/2018
Date Data Arrived at EDR: 02/20/2018
Date Made Active in Reports: 03/12/2018
Number of Days to Update: 20

Source: State Fire Marshal
Telephone: 217-785-1011
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 10/14/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 10/24/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 10/12/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 01/13/2018
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/24/2017
Date Data Arrived at EDR: 07/27/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 134

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/16/2017
Date Data Arrived at EDR: 01/23/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 80

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

CHICAGO TANKS: CDPH Storage Tanks Listing

This dataset contains Aboveground Storage Tank (AST) and Underground Storage Tank (UST) information from the Department of Public Healtha??s (CDPH) Tank Asset Database. The Tank Asset Database contains tank information from CDPH AST and UST permit applications as well as UST records imported from the historic Department of Environment (DOE) database. This dataset also includes AST records from the historic DOE and pre-1992 UST records from the Building Department.

Date of Government Version: 03/14/2018
Date Data Arrived at EDR: 03/21/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 93

Source: Department of Public Health
Telephone: 312-747-2374
Last EDR Contact: 06/20/2018
Next Scheduled EDR Contact: 10/01/2018
Data Release Frequency: Quarterly

State and tribal institutional control / engineering control registries

ENG CONTROLS: Sites with Engineering Controls
Sites using of engineered barriers (e.g., asphalt or concrete paving).

Date of Government Version: 03/28/2018
Date Data Arrived at EDR: 04/04/2018
Date Made Active in Reports: 05/22/2018
Number of Days to Update: 48

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 04/04/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

Inst Control: Institutional Controls
Legal or administrative restrictions on land use and/or other activities (e.g., groundwater use restrictions) which effectively limit exposure to contamination may be employed as alternatives to removal or treatment of contamination.

Date of Government Version: 03/28/2018
Date Data Arrived at EDR: 04/04/2018
Date Made Active in Reports: 05/22/2018
Number of Days to Update: 48

Source: Illinois Environmental Protection Agency
Telephone: 217-782-6761
Last EDR Contact: 04/04/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 06/22/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Varies

SRP: Site Remediation Program Database
The database identifies the status of all voluntary remediation projects administered through the pre-notice site cleanup program (1989 to 1995) and the site remediation program (1996 to the present).

Date of Government Version: 03/28/2018
Date Data Arrived at EDR: 04/04/2018
Date Made Active in Reports: 05/22/2018
Number of Days to Update: 48

Source: Illinois Environmental Protection Agency
Telephone: 217-785-9407
Last EDR Contact: 04/04/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Semi-Annually

State and tribal Brownfields sites

BROWNFIELDS: Municipal Brownfields Redevelopment Grant Program Project Descriptions
The Illinois Municipal Brownfields Redevelopment Grant Program (MBRGP) offers grants worth a maximum of $240,000 each to municipalities to assist in site investigation activities, development of cleanup objectives, and performance of cleanup activities. Brownfields are abandoned or underused industrial and/or commercial properties that are contaminated (or thought to be contaminated) and have an active potential for redevelopment.

Date of Government Version: 02/11/2010
Date Data Arrived at EDR: 07/31/2014
Date Made Active in Reports: 09/08/2014
Number of Days to Update: 39

Source: Illinois Environmental Protection Agency
Telephone: 217-785-3486
Last EDR Contact: 04/26/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

BROWNFIELDS: Redevelopment Assessment Database

The Office of Site Evaluations Redevelopment Assessment database identifies the status of all properties within the State in which the Illinois EPA's Office of Site Evaluation has conducted a municipal Brownfield Redevelopment Assessment.

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 05/22/2018
Number of Days to Update: 28

Source: Illinois Environmental Protection Agency
Telephone: 217-524-1658
Last EDR Contact: 04/24/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/21/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/20/2018
Next Scheduled EDR Contact: 10/01/2018
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 01/30/2018
Next Scheduled EDR Contact: 05/14/2018
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/18/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176

Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 05/04/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: No Update Planned

CDL: Meth Drug Lab Site Listing

A listing of clandestine/meth drug lab locations.

Date of Government Version: 04/09/2018
Date Data Arrived at EDR: 04/17/2018
Date Made Active in Reports: 05/22/2018
Number of Days to Update: 35

Source: Department of Public Health
Telephone: 217-782-5750
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/22/2018
Date Data Arrived at EDR: 03/01/2018
Date Made Active in Reports: 05/11/2018
Number of Days to Update: 71

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Quarterly

Local Land Records

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 05/13/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 06/29/2018
Number of Days to Update: 30

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 03/26/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 73
Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/27/2018
Next Scheduled EDR Contact: 07/09/2018
Data Release Frequency: Quarterly

SPILLS: State spills
A listing of incidents reported to the Office of Emergency Response.

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 05/01/2018
Date Made Active in Reports: 05/17/2018
Number of Days to Update: 16
Source: Illinois EPA
Telephone: 217-782-3637
Last EDR Contact: 04/06/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

IEMA SPILLS: Illinois Emergency Management Agency Spills
A listing of hazardous materials incidents reported to the Illinois Emergency Management Agency.

Date of Government Version: 05/01/2018
Date Data Arrived at EDR: 05/03/2018
Date Made Active in Reports: 05/17/2018
Number of Days to Update: 14
Source: Illinois Emergency Management Agency
Telephone: 217-524-0770
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 07/18/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 03/15/2013
Number of Days to Update: 71
Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/28/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 86
Source: Environmental Protection Agency
Telephone: 312-886-6186
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites
The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 05/15/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 03/01/2018
Date Data Arrived at EDR: 03/27/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 06/27/2018
Next Scheduled EDR Contact: 10/08/2018
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 05/08/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/22/2018
Next Scheduled EDR Contact: 10/01/2018
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 05/25/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/09/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 05/13/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 06/29/2018
Number of Days to Update: 30

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 11/02/2017
Date Data Arrived at EDR: 11/17/2017
Date Made Active in Reports: 12/08/2017
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/20/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 06/01/2017
Date Data Arrived at EDR: 06/09/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 126

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/09/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25
Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43
Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/07/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/04/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/27/2018
Next Scheduled EDR Contact: 08/06/2018
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 04/03/2018
Date Data Arrived at EDR: 04/05/2018
Date Made Active in Reports: 06/29/2018
Number of Days to Update: 85

Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/05/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 03/31/2018
Date Data Arrived at EDR: 04/16/2018
Date Made Active in Reports: 06/29/2018
Number of Days to Update: 74

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 06/22/2018
Next Scheduled EDR Contact: 10/01/2018
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 06/28/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/11/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 12/23/2016
Date Data Arrived at EDR: 12/27/2016
Date Made Active in Reports: 02/17/2017
Number of Days to Update: 52

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 05/07/2018
Next Scheduled EDR Contact: 08/20/2018
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 05/13/2018
Date Data Arrived at EDR: 05/30/2018
Date Made Active in Reports: 06/29/2018
Number of Days to Update: 30

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 07/16/2018
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 05/03/2018
Date Data Arrived at EDR: 05/31/2018
Date Made Active in Reports: 06/29/2018
Number of Days to Update: 29

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 05/31/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 05/30/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/13/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 87

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 06/20/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/21/2018
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 28

Source: EPA
Telephone: (312) 353-2000
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 09/30/2016
Date Data Arrived at EDR: 10/31/2017
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 73

Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/13/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 02/25/2018
Date Data Arrived at EDR: 03/17/2018
Date Made Active in Reports: 06/08/2018
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/06/2018
Next Scheduled EDR Contact: 09/17/2018
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 01/04/2018
Date Data Arrived at EDR: 01/19/2018
Date Made Active in Reports: 04/13/2018
Number of Days to Update: 84

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 06/01/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/20/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 03/23/2018
Number of Days to Update: 30

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Quarterly

AIRS: Air Inventory Listing

A listing of air permits and emissions information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 04/06/2018
Date Made Active in Reports: 05/22/2018
Number of Days to Update: 46

Source: Illinois EPA
Telephone: 217-557-0314
Last EDR Contact: 06/27/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ASBESTOS: ASBESTOS

A listing of asbestos abatement & demolition project site locations in the state.

Date of Government Version: 04/20/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/22/2018
Number of Days to Update: 58

Source: Illinois EPA
Telephone: 217-558-5101
Last EDR Contact: 06/27/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Varies

BOL: Bureau of Land Inventory Database

Bureau of Land inventory for facility information. Data results are cross-linked with all on-line database system applications from IEPA - Bureau of Land as well as USEPA FRS database.

Date of Government Version: 03/08/2018
Date Data Arrived at EDR: 03/22/2018
Date Made Active in Reports: 05/22/2018
Number of Days to Update: 61

Source: Illinois Environmental Protection Agency
Telephone: 217-785-9407
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Varies

CHICAGO ENV: Environmental Records Dataset

This dataset serves as a lookup table to determine if environmental records exist in a Chicago Department of Public Health (CDPH) environmental dataset for a given address. COMPLAINTS: A "Y" indicates that one or more records exist in the CDPH Environmental Complaints dataset. NESHAPS and DEMOLITON NOTICES: A "Y" indicates that one or more records exist in the CDPH Asbestos and Demolition Notification dataset. ENFORCEMENT: A "Y" indicates that one or more records exist in the CDPH Environmental Enforcement dataset. INSPECTIONS: A "Y" indicates that one or more records exist in the CDPH Environmental Inspections dataset. PERMITS: A "Y" indicates that one or more records exist in the CDPH Environmental Permits dataset. TANKS: A "Y" indicates that one or more records exist in the CDPH Storage Tanks dataset.

Date of Government Version: 03/07/2018
Date Data Arrived at EDR: 03/21/2018
Date Made Active in Reports: 05/22/2018
Number of Days to Update: 62

Source: Chicago Department of Public Health
Telephone: 312-745-3136
Last EDR Contact: 06/20/2018
Next Scheduled EDR Contact: 10/01/2018
Data Release Frequency: Varies

COAL ASH: Coal Ash Site Listing

A listing of coal ash site lcoations.

Date of Government Version: 10/01/2011
Date Data Arrived at EDR: 03/09/2012
Date Made Active in Reports: 04/10/2012
Number of Days to Update: 32

Source: Illinois EPA
Telephone: 217-782-1654
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/10/2018
Data Release Frequency: Annually

DRYCLEANERS: Illinois Licensed Drycleaners

Any retail drycleaning facility in Illinois must apply for a license through the Illinois Drycleaner Environmental Response Trust Fund. Drycleaner Environmental Response Trust Fund of Illinois.

Date of Government Version: 02/19/2018
Date Data Arrived at EDR: 02/21/2018
Date Made Active in Reports: 03/12/2018
Number of Days to Update: 19

Source: Drycleaner Environmental Response Trust Fund of Illinois
Telephone: 800-765-4041
Last EDR Contact: 05/23/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Varies

Financial Assurance: Financial Assurance Information Listing

Information for hazardous waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 12/14/2017
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 03/12/2018
Number of Days to Update: 18

Source: Illinois Environmental Protection Agency
Telephone: 217-782-9887
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: No Update Planned

HWAR: Hazard Waste Annual Report

Each year, Illinois hazardous-waste generators tell the Illinois EPA the amounts and kinds of hazardous waste they produced during the previous year. Generators indicate by code the types of wastes produced and the steps they took to manage these wastes. If some or all of these wastes were sent to commercial treatment, storage, and disposal facilities (TSDFs), that information and the identity of each receiving facility also are submitted. Illinois TSDFs likewise report the types and quantities of wastes received from in-state and out-of-state generators; they also report the procedures they used to manage these wastes.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 05/22/2018
Number of Days to Update: 49

Source: Illinois EPA
Telephone: 217-524-3300
Last EDR Contact: 03/28/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

IMPDMENT: Surface Impoundment Inventory

Statewide inventory of industrial, municipal, mining, oil & gas , and large agricultural impoundment. This study was conducted by the Illinois EPA to assess potentail for contamination of shallow aquifers. This was a one-time study. Although many of the impoundments may no longer be present, the sites may be contaminated.

Date of Government Version: 12/31/1980
Date Data Arrived at EDR: 03/08/2002
Date Made Active in Reports: 06/03/2002
Number of Days to Update: 87

Source: Illinois Waste Management & Research Center
Telephone: 217-333-8940
Last EDR Contact: 02/20/2002
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

NPDES: A Listing of Active Permits

A listing of facilities currently active in the state. The types of permits are public, private, federal and state.

Date of Government Version: 04/16/2014
Date Data Arrived at EDR: 04/18/2014
Date Made Active in Reports: 05/20/2014
Number of Days to Update: 32

Source: Illinois EPA
Telephone: 217-782-0610
Last EDR Contact: 06/27/2018
Next Scheduled EDR Contact: 10/15/2018
Data Release Frequency: Varies

PIMW: Potentially Infectious Medical Waste

Potentially Infectious Medical Waste (PIMW) is waste generated in connection with the diagnosis, treatment (i.e., provision of medical services), or immunization of human beings or animals; research pertaining to the provision of medical services; or the provision or testing of biologicals.

Date of Government Version: 03/19/2018
Date Data Arrived at EDR: 03/22/2018
Date Made Active in Reports: 05/22/2018
Number of Days to Update: 61

Source: Illinois EPA
Telephone: 217-524-3289
Last EDR Contact: 06/18/2018
Next Scheduled EDR Contact: 10/01/2018
Data Release Frequency: Varies

TIER 2: Tier 2 Information Listing

A listing of facilities which store or manufacture hazardous materials and submit a chemical inventory report.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/14/2018
Date Made Active in Reports: 03/12/2018
Number of Days to Update: 26

Source: Illinois Emergency Management Agency
Telephone: 217-785-9860
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: Annually

UIC: Underground Injection Wells

Injection wells are used for disposal of fluids by "injection" into the subsurface. The construction of injection wells range from very technical designs with twenty-four hour monitoring to simply a hole dug in the ground to control runoff. As a result of this diversity, the UIC Program divides injection wells into five different classes.

Date of Government Version: 02/21/2018
Date Data Arrived at EDR: 02/22/2018
Date Made Active in Reports: 03/12/2018
Number of Days to Update: 18

Source: Illinois EPA
Telephone: 217-782-9878
Last EDR Contact: 05/16/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Semi-Annually

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Natural Resources in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Illinois Environmental Protection Agency in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/10/2014
Number of Days to Update: 193

Source: Illinois Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Illinois Environmental Protection Agency in Illinois.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: Illinois Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 01/03/2018
Date Data Arrived at EDR: 02/14/2018
Date Made Active in Reports: 03/22/2018
Number of Days to Update: 36

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 05/18/2018
Next Scheduled EDR Contact: 08/27/2018
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/11/2017
Date Made Active in Reports: 07/27/2017
Number of Days to Update: 107

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/23/2018
Next Scheduled EDR Contact: 07/23/2018
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 04/30/2018
Date Data Arrived at EDR: 05/03/2018
Date Made Active in Reports: 06/07/2018
Number of Days to Update: 35

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 05/03/2018
Next Scheduled EDR Contact: 08/13/2018
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 07/25/2017
Date Made Active in Reports: 09/25/2017
Number of Days to Update: 62

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/12/2018
Next Scheduled EDR Contact: 07/30/2018
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 05/21/2018
Next Scheduled EDR Contact: 09/03/2018
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 04/13/2017
Date Made Active in Reports: 07/14/2017
Number of Days to Update: 92

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/11/2018
Next Scheduled EDR Contact: 09/24/2018
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.
Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.
Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.
Daycare Centers: Homes & Centers Listing
Source: Department of Children & Family Services
Telephone: 312-814-4150

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Illinois State Geological Survey
Telephone: 217-333-4747

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

DAMON GREEN LINE
DAMON AVENUE & LAKE STREET
CHICAGO, IL 60612

TARGET PROPERTY COORDINATES

Latitude (North):	41.884997 - 41° 53' 5.99''
Longitude (West):	87.676746 - 87° 40' 36.29''
Universal Tranverse Mercator:	Zone 16
UTM X (Meters):	443851.0
UTM Y (Meters):	4637015.5
Elevation:	597 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5681444 CHICAGO LOOP, IL
Version Date:	2012
South Map:	5681448 ENGLEWOOD, IL
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

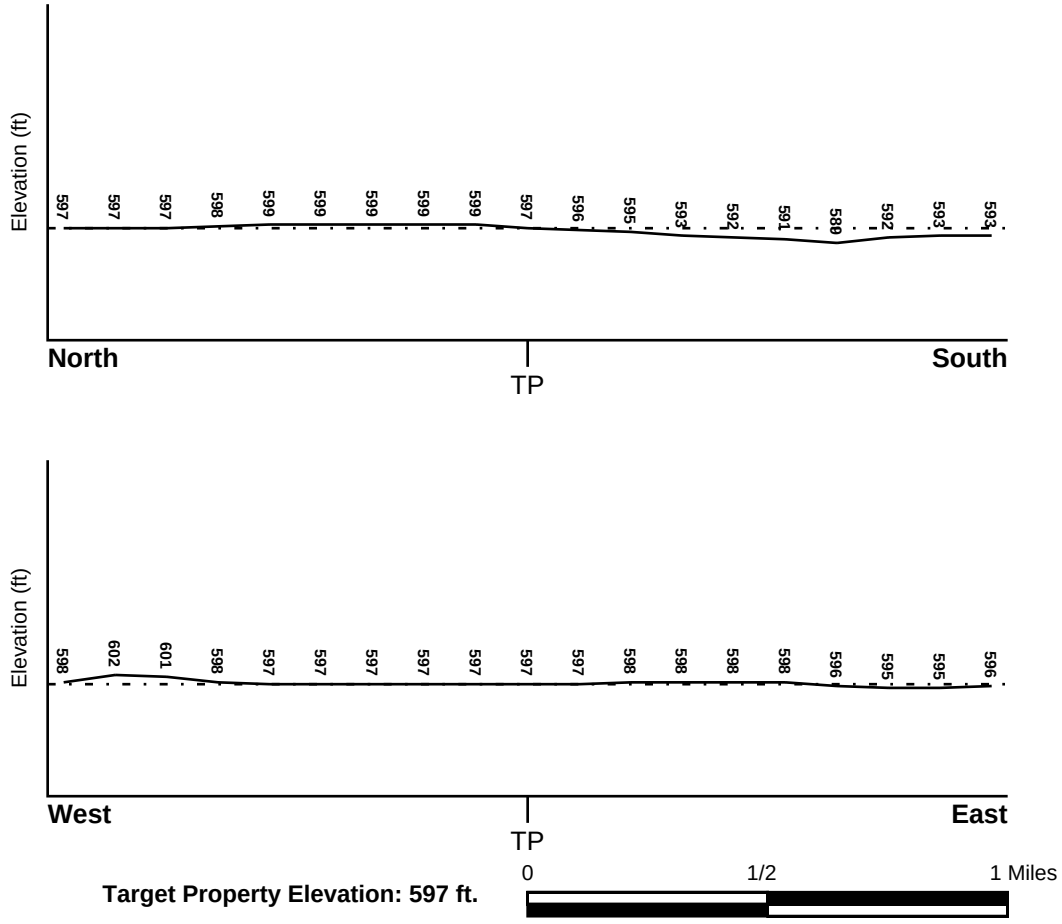
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
17031C0418J	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
17031C0415J	FEMA FIRM Flood data
1700740055B	FEMA Q3 Flood data
17031C0506J	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
CHICAGO LOOP	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Location Relative to TP:	1/2 - 1 Mile West
Site Name:	Lake Salvage Co
Site EPA ID Number:	ILD076875285
Groundwater Flow Direction:	East
Inferred Depth to Water:	approximately 15 feet.
Hydraulic Connection:	The surficial glacial drift and underlying Silurian Dolomite bedrock aquifers are hydraulically connected. The depth to bedrock is approximately 67 feet. A shale layer under the Silurian Dolomite is a confining layer.
Sole Source Aquifer:	A sole source aquifer is persent at or near the site
Data Quality:	Information is inferred in the CERCLIS investigation report(s)

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW

* ©1996 Site--specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
6	1/4 - 1/2 Mile NNE	Inconclusive
9	1/2 - 1 Mile NE	NNE
C18	1/2 - 1 Mile NW	S
D21	1/2 - 1 Mile SE	Not Reported
24	1/2 - 1 Mile ENE	Not Reported
1G	1/2 - 1 Mile ENE	Not Reported
2G	1/2 - 1 Mile NW	S
3G	1/2 - 1 Mile NE	NNE
4G	1/4 - 1/2 Mile NNE	Inconclusive
6G	1/2 - 1 Mile SE	Not Reported

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

Era:	Paleozoic
System:	Silurian
Series:	Middle Silurian (Niagoaran)
Code:	S2 *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps. The following information is based on Soil Conservation Service STATSGO data.

Soil Component Name: URBANLAND

Soil Surface Texture: variable

Hydrologic Group: Not reported

Soil Drainage Class: Not reported

Hydric Status: Soil does not meet the requirements for a hydric soil.

Corrosion Potential - Uncoated Steel: Not Reported

Depth to Bedrock Min: > 0 inches

Depth to Bedrock Max: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification			
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil	Permeability Rate (in/hr)	Soil Reaction (pH)
1	0 inches	60 inches	variable	Not reported	Not reported	Max: 0.00 Min: 0.00	Max: 0.00 Min: 0.00

OTHER SOIL TYPES IN AREA

Based on Soil Conservation Service STATSGO data, the following additional subordinant soil types may appear within the general area of target property.

Soil Surface Textures: silt loam
fine sandy loam
loam
fine sand

Surficial Soil Types: silt loam
fine sandy loam
loam
fine sand

Shallow Soil Types: sandy loam

Deeper Soil Types: silt loam
sand
loamy sand
loam

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
8	USGS40000299468	1/2 - 1 Mile NW
19	USGS40000299485	1/2 - 1 Mile NNE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

MAP ID	WELL ID	LOCATION FROM TP

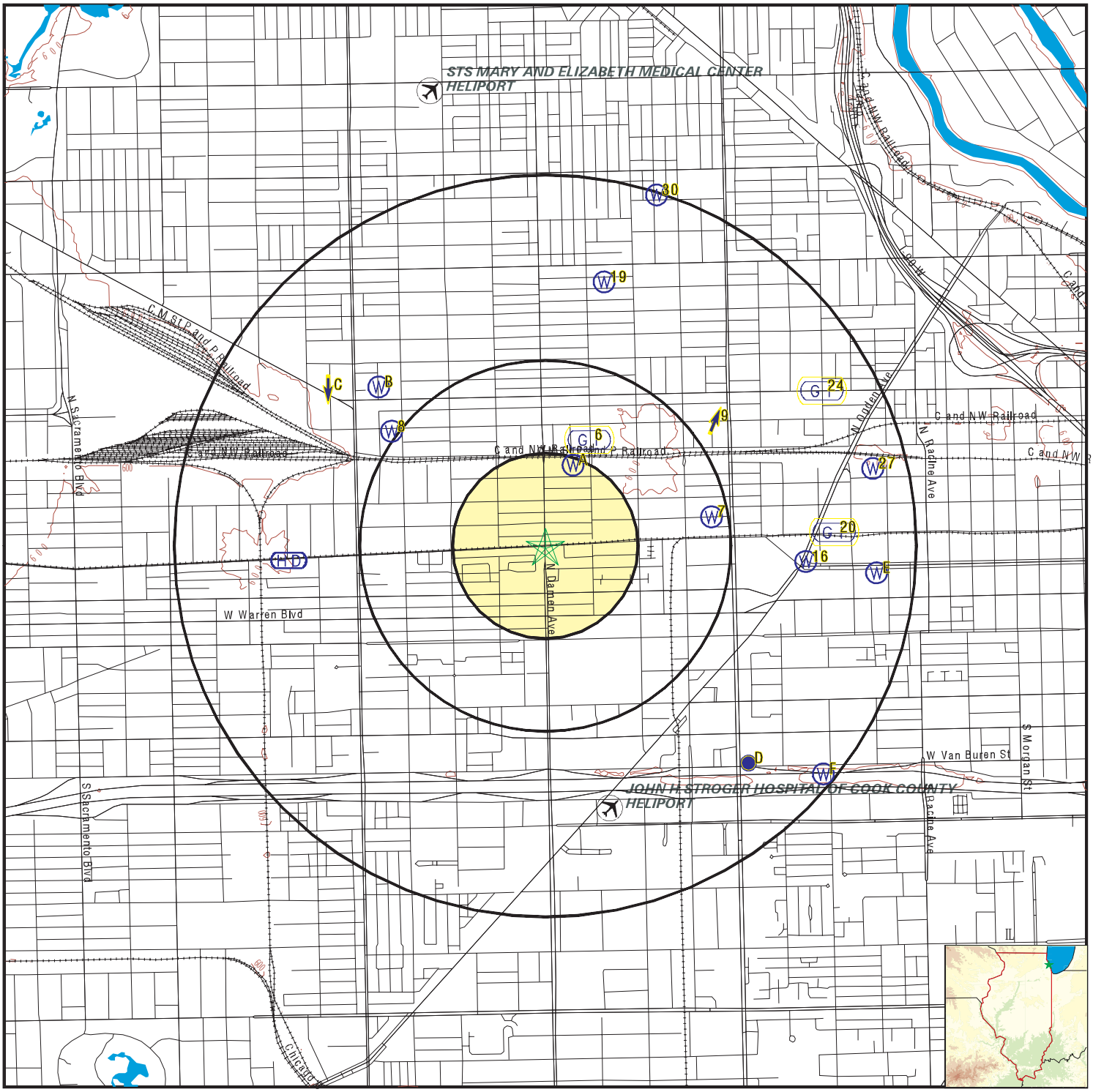
No PWS System Found

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	P7022	1/8 - 1/4 Mile NNE
A2	P7023	1/8 - 1/4 Mile NNE
A3	P7024	1/8 - 1/4 Mile NNE
A4	P7026	1/8 - 1/4 Mile NNE
A5	P7025	1/8 - 1/4 Mile NNE
7	ILSG20000218265	1/4 - 1/2 Mile East
B10	ILSG20000218911	1/2 - 1 Mile NW
B11	ILSG20000218910	1/2 - 1 Mile NW
B12	ILSG20000218909	1/2 - 1 Mile NW
B13	ILSG20000218914	1/2 - 1 Mile NW
B14	ILSG20000218913	1/2 - 1 Mile NW
B15	ILSG20000218912	1/2 - 1 Mile NW
16	ILSG20000218058	1/2 - 1 Mile East
C17	ILSG20000218917	1/2 - 1 Mile NW
D22	ILSG20000217119	1/2 - 1 Mile SE
D23	ILSG20000217120	1/2 - 1 Mile SE
E25	P7044	1/2 - 1 Mile East
E26	P7043	1/2 - 1 Mile East
27	ILSG20000218477	1/2 - 1 Mile ENE
F28	ILSG20000217122	1/2 - 1 Mile SE
F29	ILSG20000216952	1/2 - 1 Mile SE
30	ILSG20000220016	1/2 - 1 Mile NNE

PHYSICAL SETTING SOURCE MAP - 5350904.2s



- County Boundary
- Major Roads
- Contour Lines
- Airports
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data

SITE NAME:	Damon Green Line	CLIENT:	GSG Environmental Group, LLC.
ADDRESS:	Damon Avenue & Lake Street Chicago IL 60612	CONTACT:	Ted Cagney
LAT/LONG:	41.884997 / 87.676746	INQUIRY #:	5350904.2s
		DATE:	July 02, 2018 3:48 pm

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A1
NNE
1/8 - 1/4 Mile
Higher

IL WELLS **P7022**

Well ID:	023910	Second ID:	Not Reported
Info Source:	IL Private Water Wells Survey		
Owner:	CASE MOODY PIE CO		
Permit:	Not Reported	Date Drilled:	00/00/1903
Depth (in feet):	1600	Aquifer Type:	Bedrock
County Code:	031	County:	COOK
Township:	39N	Range:	14E
Section:	07	Plot Location:	Not Reported
Well Use:	IN	Well Type:	ASSUMED DRILLED
Record Type:	Any other type of record		
Driller:	GEIGER		

A2
NNE
1/8 - 1/4 Mile
Higher

IL WELLS **P7023**

Well ID:	033822	Second ID:	Not Reported
Info Source:	IL Private Water Wells Survey		
Owner:	LOMAX CO/CONSOLIDATED BOTTLING		
Permit:	Not Reported	Date Drilled:	00/00/1912
Depth (in feet):	1625	Aquifer Type:	Bedrock
County Code:	031	County:	COOK
Township:	39N	Range:	14E
Section:	07	Plot Location:	Not Reported
Well Use:	IN	Well Type:	||
Record Type:	Geology,Any other type of record		
Driller:	GEIGER		

A3
NNE
1/8 - 1/4 Mile
Higher

IL WELLS **P7024**

Well ID:	033887	Second ID:	Not Reported
Info Source:	IL Private Water Wells Survey		
Owner:	SUPERIOR MALT PRODUCTS/PFEIFER		
Permit:	Not Reported	Date Drilled:	00/00/0000
Depth (in feet):	Not Reported	Aquifer Type:	Not Reported
County Code:	031	County:	COOK
Township:	39N	Range:	14E
Section:	07	Plot Location:	Not Reported
Well Use:	IN	Well Type:	||
Record Type:	Any other type of record		
Driller:	Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

A4
NNE
1/8 - 1/4 Mile
Higher

IL WELLS **P7026**

Well ID:	033897	Second ID:	Not Reported
Info Source:	IL Private Water Wells Survey		
Owner:	WOLFF PLUMBING SUPPLY		
Permit:	Not Reported	Date Drilled:	00/00/1891
Depth (in feet):	275	Aquifer Type:	Not Reported
County Code:	031	County:	COOK
Township:	39N	Range:	14E
Section:	07	Plot Location:	Not Reported
Well Use:	IN	Well Type:	||
Record Type:	Any other type of record		
Driller:	Not Reported		

A5
NNE
1/8 - 1/4 Mile
Higher

IL WELLS **P7025**

Well ID:	033893	Second ID:	Not Reported
Info Source:	IL Private Water Wells Survey		
Owner:	WEST SIDE ICE COMPANY/J F DEWE		
Permit:	Not Reported	Date Drilled:	05/11/1889
Depth (in feet):	1969	Aquifer Type:	Bedrock
County Code:	031	County:	COOK
Township:	39N	Range:	14E
Section:	07	Plot Location:	Not Reported
Well Use:	IN	Well Type:	||
Record Type:	Geology,Any other type of record		
Driller:	MILLER		

6
NNE
1/4 - 1/2 Mile
Higher

AQUIFLOW **27203**

Site ID:	S102943733
Groundwater Flow:	Inconclusive
Deep Water Depth:	12.31
Average Water Depth:	Not Reported
Shallow Water Depth:	3.59
Current Deep Depth:	12.31
Current Average Depth:	Not Reported
Current Shallow Depth:	3.59
Date:	11/05/1992

7
East
1/4 - 1/2 Mile
Higher

IL WELLS **ILSG20000218265**

Pt api number:	120312659100	Pt status:	ENG
Pt longitude:	-87.668051		
Pt latitude:	41.886132		
Api number:	120312659100		
Longitude :	-87.668051		
Latitude :	41.886132		
Section:	7	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Cnt Area Transit
Farm num:	37	Company name:	Chicago Pub. Works Dept.
Status:	Engineering Test	Elevation:	597
Elevref:	Ground level	Total depth:	40
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

8
NW
1/2 - 1 Mile
Higher

FED USGS **USGS40000299468**

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-415322087410501		
Monloc name:	39N13E- 7.8f1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	07120003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.8894769
Longitude:	-87.6847769	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	599
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19370101	Welldepth:	1623
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

9
NE
1/2 - 1 Mile
Higher

AQUIFLOW **25019**

Site ID:	S102943955
Groundwater Flow:	NNE
Deep Water Depth:	Not Reported
Average Water Depth:	Not Reported
Shallow Water Depth:	Not Reported
Current Deep Depth:	Not Reported
Current Average Depth:	Not Reported
Current Shallow Depth:	Not Reported
Date:	3/29/93

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

B10
NW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000218911**

Pt api number:	120313272700	Pt status:	ENG
Pt longitude:	-87.685452		
Pt latitude:	41.891206		
Api number:	120313272700		
Longitude :	-87.685452		
Latitude :	41.891206		
Section:	7	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Mitchell School
Farm num:	9	Company name:	Testing Service Corp.
Status:	Engineering Test	Elevation:	0
Elevref:	Not Reported	Total depth:	22
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

B11
NW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000218910**

Pt api number:	120313272600	Pt status:	ENG
Pt longitude:	-87.685452		
Pt latitude:	41.891206		
Api number:	120313272600		
Longitude :	-87.685452		
Latitude :	41.891206		
Section:	7	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Mitchell School
Farm num:	3	Company name:	Testing Service Corp.
Status:	Engineering Test	Elevation:	0
Elevref:	Not Reported	Total depth:	20
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

B12
NW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000218909**

Pt api number:	120313272500	Pt status:	ENG
Pt longitude:	-87.685452		
Pt latitude:	41.891206		
Api number:	120313272500		
Longitude :	-87.685452		
Latitude :	41.891206		
Section:	7	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Mitchell School
Farm num:	1	Company name:	Testing Service Corp.

Status:	Engineering Test	Elevation:	0
Elevref:	Not Reported	Total depth:	20
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

B13
NW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000218914**

Pt api number:	120313273000	Pt status:	ENG
Pt longitude:	-87.685452		
Pt latitude:	41.891206		
Api number:	120313273000		
Longitude :	-87.685452		
Latitude :	41.891206		
Section:	7	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Mitchell School
Farm num:	14	Company name:	Testing Service Corp.
Status:	Engineering Test	Elevation:	0
Elevref:	Not Reported	Total depth:	20
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

B14
NW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000218913**

Pt api number:	120313272900	Pt status:	ENG
Pt longitude:	-87.685452		
Pt latitude:	41.891206		
Api number:	120313272900		
Longitude :	-87.685452		
Latitude :	41.891206		
Section:	7	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Mitchell School
Farm num:	12	Company name:	Testing Service Corp.
Status:	Engineering Test	Elevation:	0
Elevref:	Not Reported	Total depth:	20
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

B15
NW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000218912**

Pt api number:	120313272800	Pt status:	ENG
Pt longitude:	-87.685452		
Pt latitude:	41.891206		
Api number:	120313272800		
Longitude :	-87.685452		
Latitude :	41.891206		
Section:	7	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Mitchell School
Farm num:	5	Company name:	Testing Service Corp.

Status:	Engineering Test	Elevation:	0
Elevref:	Not Reported	Total depth:	20
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

16
East
1/2 - 1 Mile
Lower

IL WELLS **ILSG20000218058**

Pt api number:	120312659300	Pt status:	ENG
Pt longitude:	-87.663125		
Pt latitude:	41.884388		
Api number:	120312659300		
Longitude :	-87.663125		
Latitude :	41.884388		
Section:	8	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Cnt Area Transit
Farm num:	36	Company name:	Chicago Pub. Works Dept.
Status:	Engineering Test	Elevation:	596
Elevref:	Ground level	Total depth:	121
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

C17
NW
1/2 - 1 Mile
Higher

IL WELLS **ILSG20000218917**

Pt api number:	120313034400	Pt status:	OBS
Pt longitude:	-87.687911		
Pt latitude:	41.891254		
Api number:	120313034400		
Longitude :	-87.687911		
Latitude :	41.891254		
Section:	12	Twp:	39
Tdir:	N	Rng:	13
Rdir:	E	Farm name:	Metr Sanitry Dist Chicag
Farm num:	H747	Company name:	ATEC Associates
Status:	Observation Well	Elevation:	596
Elevref:	Ground level	Total depth:	432
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

C18
NW
1/2 - 1 Mile
Higher

AQUIFLOW **27233**

Site ID:	S102944073
Groundwater Flow:	S
Deep Water Depth:	4
Average Water Depth:	Not Reported
Shallow Water Depth:	3
Current Deep Depth:	6
Current Average Depth:	Not Reported
Current Shallow Depth:	5
Date:	03/18/1992

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

	Database	EDR ID Number
19 **NNE** **1/2 - 1 Mile** **Higher**	**FED USGS**	**USGS40000299485**

Org. Identifier:	USGS-IL		
Formal name:	USGS Illinois Water Science Center		
Monloc Identifier:	USGS-415343087402501		
Monloc name:	39N14E- 6.3a1		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	07120003	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	41.8953103
Longitude:	-87.6736655	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	minutes
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	596
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Unknown		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	2100
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

---

20 **East** **1/2 - 1 Mile** **Lower**	Site ID:	S101823471	**AQUIFLOW**	**56409**
	Groundwater Flow:	Not Reported		
	Deep Water Depth:	Not Reported		
	Average Water Depth:	Not Reported		
	Shallow Water Depth:	Not Reported		
	Current Deep Depth:	1		
	Current Average Depth:	Not Reported		
	Current Shallow Depth:	1		
	Date:	02/05/1993		

D21 **SE** **1/2 - 1 Mile** **Lower**	Site ID:	S100566966	**AQUIFLOW**	**62961**
	Groundwater Flow:	Not Reported		
	Deep Water Depth:	8.85		
	Average Water Depth:	Not Reported		
	Shallow Water Depth:	7.42		
	Current Deep Depth:	Not Reported		
	Current Average Depth:	8		
	Current Shallow Depth:	Not Reported		
	Date:	02/23/1998		

D22 **SE** **1/2 - 1 Mile** **Lower**	**IL WELLS**	**ILSG20000217119**

Pt api number:	120310317700	Pt status:	ENG
Pt longitude:	-87.665854		
Pt latitude:	41.876509		
Api number:	120310317700		
Longitude :	-87.665854		
Latitude :	41.876509		
Section:	17	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Subway Boring
Farm num:	Wh15	Company name:	Chicago Dept. of Subways
Status:	Engineering Test	Elevation:	592
Elevref:	Ground level	Total depth:	63
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

D23
SE
1/2 - 1 Mile
Lower

IL WELLS **ILSG20000217120**

Pt api number:	120310317800	Pt status:	ENG
Pt longitude:	-87.665854		
Pt latitude:	41.876509		
Api number:	120310317800		
Longitude :	-87.665854		
Latitude :	41.876509		
Section:	17	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Subway Boring
Farm num:	Wh16	Company name:	Chicago Dept. of Subways
Status:	Engineering Test	Elevation:	592
Elevref:	Ground level	Total depth:	63
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

24
ENE
1/2 - 1 Mile
Higher

AQUIFLOW **27329**

Site ID:	S102943634
Groundwater Flow:	Not Reported
Deep Water Depth:	Not Reported
Average Water Depth:	3
Shallow Water Depth:	Not Reported
Current Deep Depth:	Not Reported
Current Average Depth:	3
Current Shallow Depth:	Not Reported
Date:	10/20/1993

E25
East
1/2 - 1 Mile
Lower

IL WELLS **P7044**

Well ID:	033813	Second ID:	Not Reported
Info Source:	IL Private Water Wells Survey		
Owner:	B A ECKHART MILLING CO (DUPLIC		
Permit:	Not Reported	Date Drilled:	00/00/1902
Depth (in feet):	174	Aquifer Type:	Bedrock
County Code:	031	County:	COOK
Township:	39N	Range:	14E
Section:	08	Plot Location:	5C
Well Use:	IN	Well Type:	||
Record Type:	Geology,Chemical Analysis,Any other type of record		
Driller:	GEIGER		

E26
East **IL WELLS** **P7043**
1/2 - 1 Mile
Lower

Well ID:	023915	Second ID:	Not Reported
Info Source:	IL Private Water Wells Survey		
Owner:	B A ECKHART MILLING CO		
Permit:	Not Reported	Date Drilled:	00/00/1909
Depth (in feet):	162	Aquifer Type:	Not Reported
County Code:	031	County:	COOK
Township:	39N	Range:	14E
Section:	08	Plot Location:	5C
Well Use:	IN	Well Type:	ASSUMED DRILLED
Record Type:	Geology,Chemical Analysis,Any other type of record		
Driller:	GEIGER		

27
ENE **IL WELLS** **ILSG20000218477**
1/2 - 1 Mile
Higher

Pt api number:	120310294500	Pt status:	WATER
Pt longitude:	-87.659622		
Pt latitude:	41.888023		
Api number:	120310294500		
Longitude :	-87.659622		
Latitude :	41.888023		
Section:	8	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Eckhart Milling
Farm num:	Not Reported	Company name:	Geiger, S. B. Co.
Status:	Water Well	Elevation:	594
Elevref:	Ground level	Total depth:	288
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

F28
SE **IL WELLS** **ILSG20000217122**
1/2 - 1 Mile
Lower

Pt api number:	120310317600	Pt status:	ENG
Pt longitude:	-87.662224		
Pt latitude:	41.87654		
Api number:	120310317600		
Longitude :	-87.662224		
Latitude :	41.87654		
Section:	17	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Subway Boring
Farm num:	Wh14	Company name:	Chicago Dept. of Subways
Status:	Engineering Test	Elevation:	594
Elevref:	Ground level	Total depth:	56
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

F29
SE
1/2 - 1 Mile
Lower

IL WELLS **ILSG20000216952**

Pt api number:	120310317500	Pt status:	ENG
Pt longitude:	-87.662189		
Pt latitude:	41.87563		
Api number:	120310317500		
Longitude :	-87.662189		
Latitude :	41.87563		
Section:	17	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Subway Boring
Farm num:	Wh13	Company name:	Chicago Dept. of Subways
Status:	Engineering Test	Elevation:	593
Elevref:	Ground level	Total depth:	59
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

30
NNE
1/2 - 1 Mile
Lower

IL WELLS **ILSG20000220016**

Pt api number:	120310293000	Pt status:	ENG
Pt longitude:	-87.670922		
Pt latitude:	41.898707		
Api number:	120310293000		
Longitude :	-87.670922		
Latitude :	41.898707		
Section:	6	Twp:	39
Tdir:	N	Rng:	14
Rdir:	E	Farm name:	Land & Lake Tunnels
Farm num:	3	Company name:	Chicago Pub. Works Dept.
Status:	Engineering Test	Elevation:	597
Elevref:	Ground level	Total depth:	66
Wformation:	Not Reported	Wfmfrom:	0
Wfmto:	0	Pumpgpm:	0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
1G **ENE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	S102943634 Not Reported Not Reported 3 Not Reported Not Reported 3 Not Reported 10/20/1993	**AQUIFLOW**	**27329**
2G **NW** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	S102944073 S 4 Not Reported 3 6 Not Reported 5 03/18/1992	**AQUIFLOW**	**27233**
3G **NE** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	S102943955 NNE Not Reported Not Reported Not Reported Not Reported Not Reported Not Reported 3/29/93	**AQUIFLOW**	**25019**
4G **NNE** **1/4 - 1/2 Mile** **Lower**	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	S102943733 Inconclusive 12.31 Not Reported 3.59 12.31 Not Reported 3.59 11/05/1992	**AQUIFLOW**	**27203**
5G **East** **1/2 - 1 Mile** **Lower**	Site ID: Groundwater Flow: Deep Water Depth: Average Water Depth: Shallow Water Depth: Current Deep Depth: Current Average Depth: Current Shallow Depth: Date:	S101823471 Not Reported Not Reported Not Reported Not Reported 1 Not Reported 1 02/05/1993	**AQUIFLOW**	**56409**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation			Database	EDR ID Number
6G **SE** **1/2 - 1 Mile** **Lower**	Site ID:	S100566966	**AQUIFLOW**	**62961**
	Groundwater Flow:	Not Reported		
	Deep Water Depth:	8.85		
	Average Water Depth:	Not Reported		
	Shallow Water Depth:	7.42		
	Current Deep Depth:	Not Reported		
	Current Average Depth:	8		
	Current Shallow Depth:	Not Reported		
	Date:	02/23/1998		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

Federal EPA Radon Zone for COOK County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for COOK COUNTY, IL

Number of sites tested: 82

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	1.273 pCi/L	96%	4%	0%
Living Area - 2nd Floor	0.900 pCi/L	100%	0%	0%
Basement	1.740 pCi/L	93%	7%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Illinois State Geological Survey
Telephone: 217-333-4747

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Records
Source: Illinois Geological Survey
Telephone: 217-333-4747

Illinois Private Well Database and PICS (Public, Industrial, Commercial Survey)
Source: Illinois State Water Survey
Telephone: 217-333-9043

Water Well Location Information
Source: Illinois Environmental Protection Agency
Telephone: 217-782-0810

OTHER STATE DATABASE INFORMATION

RADON

State Database: IL Radon
Source: Department of Nuclear Safety
Telephone: 217-785-9958
County Radon Results

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

PHYSICAL SETTING SOURCE RECORDS SEARCHED

STREET AND ADDRESS INFORMATION

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APPENDIX E

Freedom of Information Act Information

Request Received

A request receipt has been emailed to emcgonigle@gsg-consultants.com.

Request Summary

Date Received
7/23/2018 1:38:04 PM
Reference ID Number(s)
None entered
Date Range
01/01/1800 - 07/23/2018
Requester Type
Other
Email
emcgonigle@gsg-consultants.com
Organization / Company
GSG Consultants
Name
Emily McGonigle
Address
623 Cooper Court
Schaumburg IL, 60173
Phone
6309942604

Request Narrative

I am requesting any and all environmental records for the following properties located in Chicago, IL 60612. The addresses are 2033 W. Walnut, 1952 W. Lake, 1939 W. Lake, and 2019 W. Lake.

Return to start (/FOIA/) Submit new request (/FOIA/Home/Create)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1990 GENERATOR ANNUAL HAZARDOUS WASTE REPORT

For Agency use |L|P|H|W|C| CARD |2|0| TRANS |A| |0|2|2|8|9|1|

GENERATOR
|I|L|
17

ILD066211160 0316275029
STANDARD EQUIPMENT CO
THOMAS DONLAN
2033 W WALNUT
CHICAGO IL 60612

GENERATOR COMPANY N

MAILING ADDRESS: _____

LOCATION WASTE GENERATED: _____
STREET CITY ZIP

CONTACT PERSON: _____ (312) 829-1419
NAME A/C PHONE

GENERATOR SIC CODE |7|6|1|3|

NON-REGULATED STATUS If your company was not regulated during 1990, circle the numeric code (1-5) that describes your non-regulated status during the entire year AND circle the code for the time period this status is expected to apply (6-8). Sign and date this form and attach comment page before mailing.

a. 1 (15) NO HAZARDOUS WASTE SHIPPED OFF-SITE

2 (15) SMALL QUANTITY GENERATOR (Did not generate more than 1000 kg of hazardous waste (or 1 Kg acutely hazardous waste) in any month or accumulate 6000 kg hazardous waste for more than 180 days or more than 270 days for waste transported to a facility over 200 miles away.)

3 (15) FARMING OR OTHER OPERATIONS EXEMPT UNDER 35 Ill. Adm. Code 721.104

4 (15) EXEMPT UNDER 35 Ill. Adm. Code 721.106

5 (15) CLOSED (Prior to 1/1/90) and no waste was shipped off-site

RECEIVED
FEB 11 1991
IEPA-DLPC

b. 6 (16) FOR 1990 ONLY, explain in comment section

7 (16) PERMANENTLY, explain in comment section

8 (16) OTHER, explain in comment section

REGULATED STATUS If your company does not qualify for non-regulated status it is regulated for 1990. You must complete the entire report including Page 1 (Generator Information), Page 2 (Comments), Page 3 (Waste Minimization), Page 4 (Transportation Services) and Page(s) 5, 6, 7, etc. (Facility Information).

This Agency is authorized to require this information under Illinois Revised Statutes, 1981, Chapter III-1/2, Sections 1004 and 1021(l)(2) Disclosure of this information is required. Failure to do so may result in a civil penalty up to $25,000 for each day the failure continues, a fine up to $1,000,000.00 and imprisonment up to 6 years This form has been approved by the Forms Management Center

CERTIFICATION I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Thomas M. Donlon Jr. Vice President Thomas M. Donlon Jr. 1-31-91
PRINT/TYPE NAME TITLE SIGNATURE DATE

Page 0 0 0 1 of 5
40 42

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1990 GENERATOR ANNUAL HAZARDOUS WASTE REPORT

GENERATOR USEPA I.D. NUMBER IL
J|L|0|0|6|6|2|1|1|1|6|0|

GENERATOR IEPA I.D. NUMBER
0|3|1|6|2|7|5|0|2|9|

COMMENTS

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1990 GENERATOR ANNUAL HAZARDOUS WASTE REPORT

GENERATOR USEPA I.D. NUMBER: ILD066211160

GENERATOR IEPA I.D: 0316275929

I. WASTE MINIMIZATION ACTIVITY

a. Efforts taken in 1990 to implement waste minimization includes the following (this can be reduction of total volume of waste or reduction of toxicity, or both, consistent with minimizing present or future threats to human health and the environment): (Indicate all that apply)

YES (NO) Did you create or expand a source reduction program during report year? This implies any action that reduces the toxicity or amount of waste exiting a process, such as feedstock modifications, process modifications, housekeeping practices

(YES) NO Did you create or expand an on-site recycling program during the report year? This implies use, reuse, or reclamation of a waste after it has been generated

YES (NO) Did you conduct a source reduction and/or recycling opportunity assessment or audit during the report year?

YES (NO) Did you use the Industrial Materials Exchange Service or another waste exchange during the report year?

IF you answered "no" to ALL of these questions, continue to section c. If you answered "yes" to ANY of these questions, continue to section b.

b. YES NO Did these efforts result in minimization of waste?

IF "yes" identify the waste streams minimized: _____

Waste type (page 6 of instructions):__ __, __ __, __ __

RCRA Hazardous Waste Code (Appendix C):__ __ __ __

Method of minimization:

___ On-site recycling
___ Equipment or technology modification/substitution
___ Process modification/substitution
___ Feedstock modification
___ Waste stream segregation
___ Industrial Materials Exchange Service or other waste exchange
___ Improved housekeeping
___ Other (Specify):_____

Results of minimization:

Quantity prevented: _____gallons

YES NO Toxicity reduction SIC codes of process _____ _____

YES NO Did efforts result in increase in emissions to air, land or water?

c. What factors delayed or prevented implementation of waste minimization?

___ Insufficient capital
___ Permitting burdens
___ Technical limitations
X Not economically feasible
___ Other, explain:_____

II. STATUS OF ON-SITE WASTE MANAGEMENT

YES NO Waste is managed on-site in RCRA permitted units. *(If yes, a TSDR Facility Annual Report must also be submitted.)*

YES NO Waste was treated, recycled, or disposed on-site in units exempt from RCRA permitting requirements. (This includes discharges under NPDES permits, direct discharges to a POTW, on-site treatment and discharge to municipal treatment works, on-site recycling, burning in industrial boilers and furnaces for energy recovery.)

If "yes" the waste type (from page 6 of the instructions) is __ __.

The amount of waste so managed during the report year was _____ tons.

If a second waste type is so managed, the waste type is __ __ and the amount managed was _____tons.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1990 GENERATOR ANNUAL HAZARDOUS WASTE REPORT

For Agency use | L P H W C (1–5) | CARD 6 0 (6–7) | TRANS A (8) | 0 2 2 8 9 1 (9–14)

GENERATOR USEPA I.D. NUMBER (18–29): I L D 0 1 6 6 7 1 1 6 P

GENERATOR IEPA I.D. NUMBER (30–39): 0 3 1 6 2 7 5 8 7 9

LIST OF TRANSPORTATION SERVICES (HAULERS) USED: *List each hauler only once regardless of the number of individual waste shipments.*

LINE NO.	TRANSPORTER NAME/ ADDRESS	TRANSPORTER USEPA I.D. NO. (95–106)	TRANSPORTER'S ILLINOIS EPA I.D. NUMBER (107–110)
01 (63–64)	SAFETY KLEEN CORP. 6333 E. 138TH ST. DOLTON ILL. 60419	I L R 0 5 7 0 6 0 5 0 8	1 1 2 3
02 (63–64)		I L R 9 8 0 6 1 3 9 1 3	1 1 2 3
03 (63–64)			
04 (63–64)			
05 (63–64)			
06 (63–64)			
07 (63–64)			
08 (63–64)			
09 (63–64)			
10 (63–64)			

Page 0 0 0 4 (15–17)

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1990 GENERATOR ANNUAL HAZARDOUS WASTE REPORT

FOR AGENCY USE | L | P | H | W | C | (1–5) | CARD | 5 | 0 | (6–7) | TRANS | A | (8) | 0 | 2 | 2 | 8 | 9 | 1 | (9–)

GENERATOR USEPA I.D. NUMBER (13–29): I L D 0 6 6 2 1 1 1 6 0

GENERATOR IEPA I.D. NUMBER (30–39): 0 3 1 6 2 7 5 0 2 8

Complete one of these pages for each Facility utilized during the year. All facilities in or out of state receiving hazardous waste generated in Illinois have a USEPA and a IEPA I.D. Number. Obtain this information from Appendix B, the facility or from your manifest copy.

FACILITY USEPA I.D. NUMBER (41–52): I L D 9 8 0 6 1 3 9 1 3

FACILITY IEPA I.D. NUMBER (53–62): 0 3 1 0 6 9 0 0 6

FACILITY NAME: SAFETY KLEEN CORP. — A/C (708) PHONE 849-4850

ADDRESS (where waste was managed): 633 E. 138th St. — CITY: Dolton — STATE: Ill. — ZIP: 60419

LINE NO.	DESCRIPTION OF WASTE	WASTE TYPE (67–68)	RCRA HAZARDOUS WASTE CODE (69–84)	AMOUNT (gals. only) (85–93)	DENSITY (lbs./gal) (94–96)	ORIGIN (132)	MGMT CTGRY (133–134)
1 (66)	RQ Waste Oil/ COMBUSTIBLE LIQUID NA-1270	06	D001	1895 ~~GALLONS~~	7.0	1	~~02~~ 16
2 (66)	Waste Petroleum Naptha, COMBUSTIBLE LIQUID, UN-1255 (EPA D001)	05	D001	154 ~~GALLONS~~	7.9	1	02
3 (66)							
4 (66)							
5 (66)							
6 (66)							
7 (66)							
8 (66)							

Page 0 0 0 5 (97–100)

ILD066211160 0316275029
STANDARD EQUIPMENT CO
2033 W WALNUT
CHICAGO, IL 60612

ILLINOIS Environmental Protection Agency
1991 Hazardous Waste Report
Form IC -- Identification and Certification

Instructions for this form found on pages 6 - 12
This form must be completed for the location shown on the above label. If you need additional forms for other locations, call IEPA.

FOR AGENCY USE
___ IC
___ Others
___ Edit Letter
___ Corrected

Sec. I -- Generator Status

A. RCRA Generator Status *(Enter one code)*

30 [2]
1 = LQG
2 = SQG Skip to Box C
3 = CESQG
4 = Nongenerator (Continue to Box B)

B. Reason for not generating *(Check all that apply)*

31 ___ Never generated
32 ___ Out of business
33 ___ Only excluded or delisted waste generated
34 ___ Only non-hazardous waste generated
35 ___ Periodic generator, none in reporting year
36 ___ Waste minimization activity
37 ___ Other *(Specify in comments box)*

C. 38 1 = Status is expected to be the same next year and following years. 2 = Status is expected to change next year

Section II. Enter the SIC Code(s) for this location.

39 [7 5 1 3] 43 ____ 47 ____ 51 ____

Section III. On-Site Waste Management Status *(enter one code for each question)*

A. 55 [8] RCRA regulated (permitted or interim status) storage
B. 56 [1] RCRA permitted or interim status treatment, disposal, or recycling
C. 57 [1] RCRA exempt treatment, disposal, or recycling

Section IV. Waste minimization activity during this reporting year *(Enter Y [Yes] or N [No] for questions A-D)*

A. 58 [N] Did this site begin or expand a **source reduction** activity this year?
B. 59 [N] Did this site begin or expand a **recycling** activity this year?
C. 60 [N] Did this site systematically investigate opportunities for **source reduction or recycling?**
D. Did any of the factors listed below delay or limit this site's ability to initiate new or additional **source reduction** or on-site or off-site **recycling** activities this year; if yes, enter Y below.

S. Reduc.	Recyc.		
61 ___	71 ___		Insufficient capital to install new source reduction equipment or implement new source reduction practices
62 ___	72 ___		Lack of technical information on techniques applicable to the specific production processes
63 Y	73 Y		Not economically feasible: cost savings in waste management or production will not recover the capital investment
64 ___	74 ___		Concern that product quality may decline as a result
65 ___	75 ___		Permitting burdens
66 ___	76 ___		Previously implemented -- additional reduction/recycling does not appear to be technically feasible
67 ___	77 ___		Previously implemented -- additional reduction/recycling does not appear to be economically feasible
68 ___	78 ___		Previously implemented -- additional reduction/recycling does not appear to be feasible due to permitting requirements
69 ___			Technical limitations of the production processes
	79 ___		Requirements to manifest wastes inhibit shipments off site for recycling
	80 ___		Financial liability provisions inhibit shipments off site for recycling
	81 ___		Technical limitations of production processes inhibit shipments off site for recycling
	82 ___		Technical limitations of production processes inhibit off site recycling
	83 ___		Lack of permitted off-site recycling facilities
	84 ___		Unable to identify a market for recyclable materials
70 ___	85 ___		Other *(Specify in Comments box)*

Sec. V. This Agency is authorized to require this information under Revised Statutes, 1981, Chapter 111-1/2, Sections 1004 and 1021 (f)(2). Disclosure of this information is required. Failure to do may result in a civil penalty up to $25,999 for each day the failure continues, a fine up to $1,000,000.00 and imprisonment up to 5 years. This form has been approved by the Forms Management

CERTIFICATION I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalti false information, including the possibility of fine and imprisonment.

A. Please print: Last Name DONLON, JR. First Name THOMAS B. Title VICE-PRESIDENT

C. Signature Thomas M. Donlon Jr. D. Date of signature 1-10-92

COMMENTS: ___ 86 Enter Y (Yes) if you have comments regarding this page and attach extra sheet.

ILD066211160 0316275029
STANDARD EQUIPMENT CO
2033 W WALNUT
CHICAGO, IL 60612

ILLINOIS Environmental Protection Agency
1991 Hazardous Waste Report
Form TI – Transporter Identification

Instructions for this form found on page 32.

1. U.S. EPA ID No. I L D 9 8 0 6 1 3 9 1 3 (30)
Transporter Name and Address:
SAFETY KLEEN CORP.
633 E. 138TH ST.
DOLTON, IL 60419

2. U.S. EPA ID No. I L D 0 0 0 6 6 5 8 6 9 (42)
Transporter Name and Address:

SAFETY KLEEN CORP.
450 DOMENIC CT.
FRANKLIN PARK, IL 60131

3. U.S. EPA ID No _____ (54)
Transporter Name and Address:

4. U.S. EPA ID No. _____ (66)
Transporter Name and Address:

5. U.S. EPA ID No. _____ (78)
Transporter Name and Address:

6. U.S. EPA ID No. _____ (90)
Transporter Name and Address:

7. U.S. EPA ID No. _____ (102)
Transporter Name and Address:

8. U.S. EPA ID No. _____ (114)
Transporter Name and Address:

COMMENTS: _____ (126) Enter Y (Yes) if you have comments regarding this page and attach extra sheet.

9272.0013641

MAECORP

January 24, 1990

Mr. Jim Pierce
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
Division of Land Pollution Control (#24)
2200 Churchill Road
Springfield, Illinois 62794

Dear Mr. Pierce,

On behalf of Standard Equipment Company, MAECORP requests assignment of a U.S. EPA Generator ID#. Please process the enclosed notification of hazardous waste activity, and return a copy to my attention. An Illinois Generator ID# request form has been sent to Joyce Wilkinson of the IEPA.

Thank you for your time and cooperation.

Sincerely,

MAECORP, Inc.

Ross Herman

Ross Herman
Customer Service Representative

Enclosure

RECEIVED
JAN 26 1990
IEPA/DLPC

99272.001362

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Form Approved. OMB No. 2050-0028 Expires 9-30-88
GSA No. 0246-EPA-OT

United States Environmental Protection Agency
Washington, DC 20460

EPA Notification of Hazardous Waste Activity

Please refer to the *Instructions for Filing Notification* before completing this form. The information requested here is required by law (*Section 3010 of the Resource Conservation and Recovery Act*).

For Official Use Only

Comments

RECEIVED
03162750 29
JAN 26 1990

Installation's EPA ID Number	Approved	Date Received (yr. mo. day)
F I L D 0 6 6 2 1 1 1 6 0	T/A C 1	

I. Name of Installation

Standard Equipment Company

II. Installation Mailing Address

Street or P.O. Box: 2033 W Walnut

City or Town	State	ZIP Code
Chicago	IL	60612

III. Location of Installation

Street or Route Number: 2033 W Walnut

City or Town	State	ZIP Code
Chicago	IL	60612

IV. Installation Contact

Name and Title (last, first, and job title)	Phone Number (area code and number)
Donlan, Thomas, Jr V-P	3128291919

V. Ownership

A. Name of Installation's Legal Owner	B. Type of Ownership (enter code)
Standard Equipment Co	P

VI. Type of Regulated Waste Activity (*Mark 'X' in the appropriate boxes. Refer to instructions*)

A. Hazardous Waste Activity

- [X] 1a. Generator
- [ ] 1b. Less than 1,000 kg/mo.
- [ ] 2. Transporter
- [ ] 3. Treater/Storer/Disposer
- [ ] 4. Underground Injection
- [ ] 5 Market or Burn Hazardous Waste Fuel *(enter 'X' and mark appropriate boxes below)*
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner

B. Used Oil Fuel Activities

- [ ] 6. Off-Specification Used Oil Fuel *(enter 'X' and mark appropriate boxes below)*
  - [ ] a. Generator Marketing to Burner
  - [ ] b. Other Marketer
  - [ ] c. Burner
- [ ] 7. Specification Used Oil Fuel Marketer *(or On site Burner)* Who First Claims the Oil Meets the Specification

VII. Waste Fuel Burning: Type of Combustion Device (*enter 'X' in all appropriate boxes to indicate type of combustion device(s) in which hazardous waste fuel or off-specification used oil fuel is burned. See instructions for definitions of combustion devices.*)

- [ ] A. Utility Boiler
- [ ] B. Industrial Boiler
- [ ] C. Industrial Furnace

VIII. Mode of Transportation (*transporters only — enter 'X' in the appropriate box(es)*)

- [ ] A. Air
- [ ] B. Rail
- [ ] C. Highway
- [ ] D. Water
- [ ] E. Other (*specify*)

IX. First or Subsequent Notification

Mark 'X' in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your installation's EPA ID Number in the space provided below.

- [X] A. First Notification
- [ ] B. Subsequent Notification (*complete item C*)

C. Installation's EPA ID Number

99272.0013S3

| ID — For Official Use Only | | |

Electronic FOIA Request Form PDF

FOIA Request Date:	07/23/2018
Web Request #:	25873
Requestor:	Emily McGonigle
Business Name:	GSG Consultants
Address:	623 Cooper Court
City State Zip:	Schaumburg, IL 60173
Phone:	630-994-2604
Email Address:	emcgonigle@gsg-consultants.com
Preferred Contact Method:	Email

Will any part of the requested information, records or documentation be used, in any form, for sale, resale, solicitation or advertisement for sales or services? No

Information Requested:

I am requesting any and all records for the following properties located in Chicago, IL 60612. The addresses are 2033 W. Walnut - 2035132,
1952 W. Lake - Nothing found,
1939 W. Lake - Nothing found,
2019 W. Lake - Nothing found

Fee Justification: In accordance with 5 ILCS 140/6(c), fees for public records may be reduced or waived if determined by the Agency to be in the public interest. If applicable, please provide a justification in the comments field below.

Questions or Comments:

July 24, 2018

Emily McGonigle
623 Cooper Court
Schaumburg, IL 60173

Dear Emily McGonigle:

The Office of the State Fire Marshal received your request for documents, pursuant to the Freedom of Information Act ("Act"), on 07/23/2018. Enclosed, and pursuant to the Act, please find those documents responsive to your request that are prepared or maintained by the Office of the State Fire Marshal.

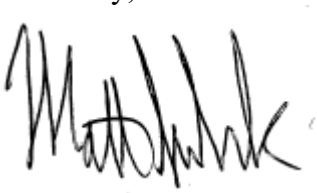
Pursuant to Section 9.5 of the Act, "any person whose request to inspect or copy a public record is denied by a public body, may file a request for review with the Public Access Counselor established in the Office of the Attorney General not later than 60 days after the date of the final denial." Such requests must be in writing, signed by the requester and include (1) a copy of the request for access to records and (2) any response from the OSFM. Further information on such requests contact:

Sarah Pratt
Acting Public Access Counselor
Office of the Attorney General
500 S. 2nd Street
Springfield, Illinois 62706
Phone: 1-877-299-FOIA
(1-877-299-3642)
Fax: (217) 782-1396

For your added convenience, we now also offer electronic submission of FOIA requests. To use this feature please go to http://www.sfm.illinois.gov/public/foia.aspx and simply fill out our electronic FOIA request form.

Should you have further questions regarding this matter, please contact me at your earliest convenience.

Sincerely,



Matt Sebek
Deputy General Counsel – FOIA Officer
Office of the State Fire Marshal
217-785-1011

W

NO FILE

CITY OF CHICAGO- DEPARTMENT OF INSPECTIONAL SERVICES **PERMIT NO. B.** 719174

PERMIT NO.	WORK CODE	PLAN NO.	PRIMARY ADDRESS	F/R	SECONDARY ADDRESS	CACT
719174	25020		2033- W WALNUT	O	-	2505

DESCRIPTION OF WORK: REMOVE 1-2M F.O.TK — DATE ISSUED: 1/05/90

					CON-TRACTOR LICENSE
OWNER	STANDARD EQUIPMENT	2033 W WALNUT n/a	CHGO	IL	
REFRIG					
GENERAL	MAECORP INCORPORATED	333 W 19 ST	GLENWOOD	IL	7947
ARCHITECT		IL 227			
HEAT/VENT					
MASON					
PLUMBING					

PERMANENT REAL ESTATE INDEX NO. 588-17-07-315-009

WH	PL FIX	CONST.	STORIES	BSMTS.	W	L	H	BLDG. VOL.	EST. COST	D.U.	OCC. CLASSIFICATION
											J

LOT SIZE	PKG. SP	LOAD	APPLIC PHONE	
			709-0333	WAREHOUSE

D	FEE	CD	FEE	CD	FEE	CD	FEE	CD	FEE	CD	FEE	CD	FEE	TOTAL FEES
												26	3500	35.00

LEGAL DESCRIPTION

No Site ft

PERMISSION is hereby granted the above named person or firm to construct buildings and do other work as indicated in the schedule hereon, at the location shown. All work is to be done in accordance with approved plans and the ordinances of the City of Chicago, and this permit may be revoked at any time for violation of the ordinances in connection with work herein authorized.

APPROVED PLANS AND PERMIT SHALL BE KEPT ON FILE AT THE CONSTRUCTION SITE WHILE THE WORK IS IN PROGRESS. (SEC 45 10) IF WORK DOES NOT START WITHIN SIX MONTHS OF THE DATE OF THIS PERMIT, THE PERMIT SHALL BECOME VOID. (SEC. 43-9)

	EXPLANATION OF FEE CODES		
19-ZONING			29-WATER
20-IRON	23-PLUMBING	26-TANKS	30-REFRIGERATION
21-ELECTRICAL	24-ELEVATOR	27-FURNACE	62-WRECKED BLDGS.
22-NEW CONST.	25-HEAT/VENT	28-SMOKE ABATEMENT	82-GARAGES

Any person violating, or resisting, or opposing the enforcement of any of the provisions of the Code pertaining to permits shall be fined not less than $25.00 nor more than $200.00 for each offense. Each day such violation shall continue shall constitute a separate and distinct offense, and any building or contractor who shall construct any building in violation of the provisions of the City Code, and any architect who shall design, draw plans for, or have supervision of such building, or who shall permit it to be constructed, shall be liable for the penalties provided by the section.

Received amount indicated hereon

Dept. of Revenue

SEWER DEPT.

1-10-90

RECEIVED
JUL 28 1992
DIV. OF PETROLEUM & CHEMICAL SAFETY

APPENDIX F

Site Photographs

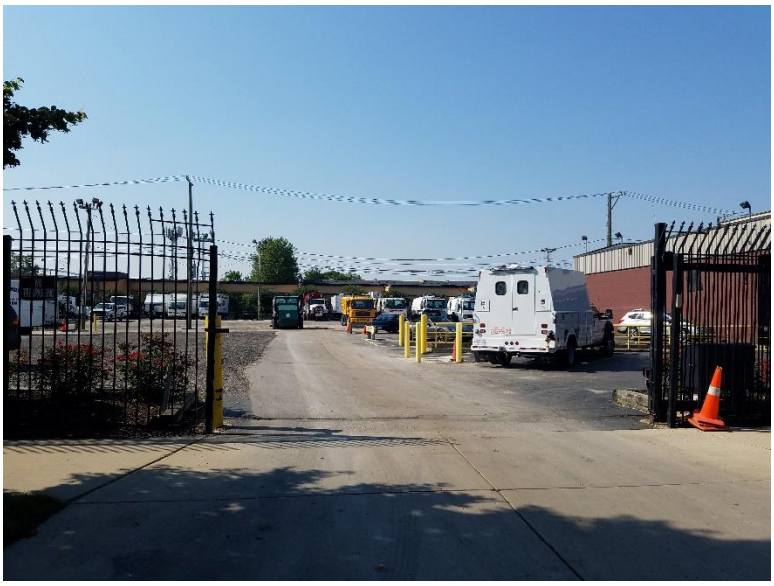
Date: July 24, 2018
Taken By: TC
Vacant lot on Site 1, facing southwest

Date: July 24, 2018
Taken By: TC
Vacant lot on Site 1, with pole-mounted transformer, facing southwest

Date: July 24, 2018
Taken By: TC
West side of Lake Street, Sites 1 and 5, facing west

Date: July 24, 2018
Taken By: TC
East side of Lake Street, Sites 1 and 5, facing east

Date: July 24, 2018
Taken By: TC
Building on Site 2, facing east



Date: July 24, 2018
Taken By: TC
Parking lot on west side of Site 2, facing south

Date: July 24, 2018
Taken By: TC
AST in parking lot of Site 2, facing west

Date: July 24, 2018
Taken By: TC
Site 3, facing north

Date: July 24, 2018
Taken By: TC
Site 3, facing south

Date: July 24, 2018
Taken By: TC
West side of building on Site 4, facing northwest

Date: July 24, 2018
Taken By: TC
East side of building on Site 4, facing northeast

Date: July 24, 2018
Taken By: TC
Three (3) pole-mounted transformers on north side of Site 4, facing northeast

Date: July 24, 2018
Taken By: TC
Three (3) pole-mounted transformers on north side of Site 4, facing northeast

Date: July 24, 2018
Taken By: TC
Site 6, facing south

Date: July 24, 2018
Taken By: TC
Machine building on south side of Site 6, facing west

Date: July 24, 2018
Taken By: TC
Pole-mounted transformers on south side of Site 6

Date: July 24, 2018
Taken By: TC
Site 7, facing southwest

Date: July 24, 2018
Taken By: TC
Buildings on Site 8, facing south

Date: July 24, 2018
Taken By: TC
Vacant lot on Site 8, facing south

Date: July 24, 2018
Taken By: TC
Site 9, facing northeast (typical)

Limited LBP Survey Report

CTA Damen Green Line Elevated Station

Lake Street & Damen Avenue
Chicago, Illinois 60612

Inspection Date: August 8, 2018

GSG Project No.: 18-1051

GSG CONSULTANTS, INC.
2942 West Van Buren Street, Suite 200
Chicago, Illinois 60612
Tel: 312.733.6262 | Fax: 312.733.5612

Integrity | Quality | Reliability

August 21, 2018

SIGNATURE PAGE

Limited LBP Survey Report

Damen Green Line Elevated Station
At Lake St. & Damen Ave.
Chicago, Illinois 60612

GSG Project Number: 18-1051

Prepared By: _____ 8/21/2018
Roberto Rivera, Date:
Senior Project Manager

Reviewed By: _____ 8/21/2018
Jigar Shah, CSP, CIH, Date:
Director of Industrial Hygiene

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EXECUTIVE SUMMARY 1
1.0 INTRODUCTION 1
1.3 Report Organization 1
2.0 SURVEY METHODOLOGY 2
Lead Based Paint 2
3.0 SUMMARY OF FINDINGS 3
Lead-Based Paint 3
4.0 CONCLUSIONS AND RECOMMENDATIONS 6
Lead-Based Paint 6
5.0 CERTIFICATION 7

Tables

Table 3.1a – Components/Surfaces that tested positive for LBP 2
Table 3.1b – Components/Surfaces that tested negative for LBP 2

Appendices

Appendix A XRF Field Data Sheets
Appendix B Reference Photographs
Appendix C XRF Performance Characteristic Sheets
Appendix D Lead Inspector License and Certification

EXECUTIVE SUMMARY

Scope and Objectives

GSG Consultants, Inc. (GSG) was retained by Perkins + Will to conduct a Limited Lead-Based Paint survey at the CTA Green Line Station located at Damen Av. & Lake St. in Chicago, Illinois. The purpose of the survey was to identify and test the surfaces/components for lead-based paint (LBP) that may be present in the planned renovation areas associated with the planned Damen Elevated Station.

The LBP survey was conducted on August 3, 2018 by Illinois Department of Public Health (IDPH) Licensed Lead Inspector.

Findings

Lead-Based Paint: LBP was not identified on the painted surfaces/components tested. In general surfaces/ components that tested negative for LBP included:

- Steel columns, flange cleat angles and cover plates

The specific materials tested are summarized in **Tables 3.1a** and **3.1b.**

1.0 INTRODUCTION

GSG Consultants, Inc. (GSG) was retained by Perkins + Will to conduct a Limited Lead-Based Paint survey at the CTA Green Line Station located at Damen Av. & Lake St. in Chicago, Illinois. The limited survey was conducted by GSG on August 3, 2018.

1.1 Scope and Objectives

The purpose of the limited survey was to identify the location of LBP that may require mitigation/removal prior to the proposed renovation activities. The scope of this survey was limited to the locations of the testing described herein.

1.2 General Qualifications

The results, findings, conclusions and recommendations expressed in this report are based on conditions observed during GSG's survey. The information contained in this report represents conditions at the time of the survey and may not accurately represent conditions at a later date. The conclusions in this report are based on conditions observed in the surveyed areas. Any additional potential hazardous materials encountered that will be disturbed during renovation activities and that differ from the components/surfaces tested during this survey, will require further testing prior to disturbance. This report has been prepared with generally accepted industry practices and procedures. No other warranty, either expressed or implied, is made.

1.3 Report Organization

The report is divided into five sections which discuss the survey activities and methodology, findings, conclusions and recommendations associated with the materials/areas addressed during this survey, as follows:

- Section 1.0 - Introduction
- Section 2.0 - Survey Methodology
- Section 3.0 - Summary of Findings
- Section 4.0 - Conclusions and Recommendations
- Section 5.0 - Certification

Supporting documentation is appended and referenced in each section as appropriate.

2.0 SURVEY METHODOLOGY

This section describes GSG's limited survey approach and methodologies that were utilized during the field investigation activities. The survey included performing the following task:

- LBP Inspection and Testing

The following sections present an overview of GSG's approach for each type of survey completed as part of this project.

Lead Based Paint

The LBP survey was conducted in accordance with HUD and EPA protocol. The survey included a visual inspection to identify suspect material, analysis of suspect material, and data recording. The objective of the testing was to identify painted surfaces with a concentration of lead above 1.0 mg/cm^2 by x-ray fluorescence (XRF) analysis, the criteria established by the Environmental Protection Agency (EPA) and HUD for classification of lead-based paint. The survey was performed by an IDPH-Licensed Lead Inspector using an XRF spectrum analyzer; RMD Model LPA-1 (Serial Number 3233R) manufactured by Protect Instrument Corporation of Waltham, MA. A copy of the inspector's license and training certificate are provided in Appendix D.

A portable XRF analyzer was used due to its demonstrated ability to determine if LBP is present on numerous types of surfaces, analyze the paint without destructive sampling or paint removal, and provide sample results immediately and at a relatively low cost per sample. Portable XRF instruments expose a building component to x-rays or gamma radiation, which causes lead to emit x-rays with a characteristic frequency or energy. The intensity of this radiation is measured by the instrument. The inspector then compares the displayed value (reading) on the analyzer with the inconclusive range or threshold specified in the XRF Performance Characteristic Sheet (Appendix C) for the specific substrate being tested. If the reading is less than the lower boundary of the inconclusive range, or less than the threshold, then the reading is considered negative. If the reading is greater than the upper boundary of the inconclusive range, or greater or equal to the threshold, then the reading is considered positive. Readings within the inconclusive range, including its boundary values, are considered inconclusive. Because the inconclusive ranges and/or thresholds shown in the Performance Characteristic Sheet are based on 1.0 mg/cm^2, positive and negative readings are consistent with the HUD definition of lead-based paint for identification purposes.

3.0 SUMMARY OF FINDINGS

Lead-Based Paint

The Radiation Monitoring Device, LPA-1 XRF Spectrum Analyzer, in accordance with HUD/IDPH Protocol, was used to identify components and surfaces that may contain LBP. LBP was not identified on painted surfaces/components tested during this limited survey as indicated in **Table 3.1b**. Refer to Appendix A for XRF Field Data Sheets. Reference photographs are provided in Appendix B.

Table 3.1a
Components/Surfaces that Tested POSITIVE for LBP

Room/ Location	Component	Substrate	Color	XRF Readings mg/cm²	Test Results
N/A	N/A	N/A	N/A	N/A	N/A

Table 3.1b
Components/Surfaces that Tested NEGATIVE for LBP

Room/ Location	Component	Substrate	Color	XRF Readings mg/cm²	Test Results
Lake Street West of Dame (SW)	Column 2222	Steel	Beige	0.1	Negative
	Column 2222 Flange Cleat Angle	Steel	Beige	0.2	Negative
	Column 2222 Cover Plate	Steel	Beige	0.1	Negative
	Column 2221	Steel	Beige	0.3	Negative
	Column 2221 Flange Cleat Angle	Steel	Beige	0.2	Negative
	Column 2221 Cover Plate	Steel	Beige	0.4	Negative
	Column 2223	Steel	Beige	0.1	Negative
	Column 2223 Flange Cleat Angle	Steel	Beige	0.2	Negative
	Column 2223 Cover Plate	Steel	Beige	0.1	Negative
Lake Street West of Dame (NW)	Column 2222	Steel	Beige	0.0	Negative

Room/ Location	Component	Substrate	Color	XRF Readings mg/cm²	Test Results
Lake Street West of Dame (NW)	Column 2222 Flange Cleat Angle	Steel	Beige	0.4	Negative
	Column 2222 Cover Plate	Steel	Beige	0.1	Negative
	Column 2221	Steel	Beige	0.0	Negative
	Column 2221 Flange Cleat Angle	Steel	Beige	0.0	Negative
	Column 2221 Cover Plate	Steel	Beige	0.1	Negative
Lake Street East of Damen (NE)	Column 2220	Steel	Beige	0.1	Negative
	Column 2220 Flange Cleat Angle	Steel	Beige	0.3	Negative
	Column 2220 Cover Plate	Steel	Beige	0.5	Negative
	Column 2219	Steel	Beige	0.1	Negative
	Column 2219 Flange Cleat Angle	Steel	Beige	0.1	Negative
	Column 2219 Cover Plate	Steel	Beige	0.3	Negative
	Column 2218	Steel	Beige	0.0	Negative
	Column 2218 Flange Cleat Angle	Steel	Beige	0.4	Negative
	Column 2218 Cover Plate	Steel	Beige	0.0	Negative
Lake Street East of Damen (SE)	Column 2220	Steel	Beige	0.1	Negative
	Column 2220 Flange Cleat Angle	Steel	Beige	0.0	Negative
	Column 2220 Cover Plate	Steel	Beige	0.3	Negative
	Column 2219	Steel	Beige	0.1	Negative
	Column 2219 Flange Cleat Angle	Steel	Beige	0.1	Negative
	Column 2219 Cover Plate	Steel	Beige	0.5	Negative
	Column 2218	Steel	Beige	0.1	Negative
	Column 2218 Flange Cleat Angle	Steel	Beige	0.3	Negative

Room/ Location	Component	Substrate	Color	XRF Readings mg/cm²	Test Results
Lake Street East of Damen (SE)	Column 2218 Cover Plate	Steel	Beige	0.5	Negative

4.0 CONCLUSIONS AND RECOMMENDATIONS

Lead-Based Paint

LBP was not identified on the painted surfaces/components tested. In general surfaces/ components that tested negative for LBP included:

- Steel columns, flange cleat angles and cover plates

For the surfaces/components that tested negative during this survey, the Occupational Safety and Health Administration (OSHA) Lead in Construction Standard states that "negative" readings (i.e. those below the HUD/EPA definition of what constitutes LBP (1.0 mg/cm^2) DO NOT relieve contractors from performing exposure assessments (personal air monitoring) on their employees per the OSHA Lead Standard, and should not be interpreted as lead is not present. Although a reading may indicate "negative", airborne lead concentrations still may exceed the OSHA Action Level or the OSHA Permissible Exposure Limit (PEL) depending on the work activity. GSG recommends that prior to any renovation activities in the building, engineering control measures be implemented in the renovation area to minimize the generation of dust, and site worker and occupant exposures to lead.

For any surfaces/components that are not listed in **Table 3.1b** were not tested during this limited survey, such surfaces/components shall be assumed and treated as LBP until tested and proven otherwise.

5.0 CERTIFICATION

The undersigned hereby affirm that the conditions described herein are accurate to the best of our knowledge and belief, and are subject to the limitations inherent in the investigative techniques used and any expressed limitations of this survey. Applicable licensing to perform the described survey activities were valid at the time of performance of services in accordance with applicable federal, state and local laws, rules and regulations.

Inspection Performed By:

Roberto Rivera	003649
Lead Inspector's Name	IDPH License #
Roberto Rivera	08/21/2018
Lead Inspector's Signature	Date

APPENDIX A

XRF Field Data Sheets

GSG CONSULTANTS, INC.
Engineering and Industrial Hygiene Services
2942 W. Van Buren St.
Chicago, IL 60612
(312) 733-6262 Fax: (312) 733-5612
www.gsg-consultants.com

XRF ENVIRONMENTAL DATA SHEETS

Project Name: Damen Green Line Elev.		**Project Manager:**	
Project Number:		**Building Inspector:** Roberto Rivera	
Project Address: Damen & Lake St.		**IDPH Number:** 003649	**XRF Serial Number:** 3233R
City/ State: Chicago, IL		**Comments:**	
Client: Perkins + Will	**Date:** 8/3/18		

Shot	Room/Area	Reading	Component	Walls N	Walls E	Walls S	Walls W	Ceiling C	Floor F	Substrate	Color	Damage/ Comments
1	Calibration	1.0										
		1.0										
		1.0										
	Lake St. W. of Damen	0.1	Column 2222							steel	Yellow	SW
5		0.2	Column 2222 Flange cleat angle									
		0.1	Column 2222 cover plate									
		0.3	Column 2221									
		0.2	Column 2221 Flange cleat Angle									
		0.4	Column 2221 cover plate									
10		0.1	Column 2223									
		0.2	Column 2223 Flange cleat Angle									
		0.1	Column 2223 cover plate									
		0.0	Column 2222									NW
		0.4	Column 2222 Flange cleat Angle									
15		0.1	Column 2222 cover plate									
		0.0	Column 2221									
		0.0	Column 2221 Flange cleat Angle									
		0.1	Column 2221 cover plate									
	Lake St. E. of Damen	0.1	Column 2220									NE
20		0.3	Column 2220 Flange cleat Angle									

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XRF ENVIRONMENTAL DATA SHEETS

Project Name:	**Project Manager:**
Project Number:	**Building Inspector:** Roberto Rivera
Project Address: .	**IDPH Number:** 003649 **XRF Serial Number:** 3233R
City/ State:	**Comments:**
Client: Perkins + Will **Date:** 8/3/18	

Shot	Room/Area	Reading	Component	Walls N	Walls E	Walls S	Walls W	Ceiling C	Floor F	Substrate	Color	Damage/ Comments
21	Lake St. E. of Dame	0.5	Column 2220 Cover Plate							Steel	Yellow	NE
		0.1	Column 2219									
		0.1	Column 2219 Flange cleat Angle									
		0.3	Column 2219 Cover Plate									
25		0.0	Column 2218									
		0.4	Column 2218 Flange cleat Angle									
		0.0	Column 2218 Cover Plate									
		0.1	Column 2220									SE
		0.0	Column 2220 Flange cleat Angle									
30		0.3	Column 2220 Cover Plate									
		0.1	Column 2219									
		0.1	Column 2219 Flange cleat Angle									
		0.5	Column 2219 Cover Plate									
		0.1	Column 2218									
35		0.3	Column 2218 Flange cleat Angle									
		0.5	Column 2218 Cover Plate									
	Calibration	1.0										
		1.0										
		1.0										
40		.										

APPENDIX B

Reference Photographs

Description: Steel Column (typical)	**Photo Location:** Lake Street

Damen Green Line Station Lake St. and Damen Ave. Chicago, Illinois	GSG Consultants, Inc. 2942 W. Van Buren St., Suite 200 Chicago, IL. 60612	**Date:** August 3, 2018

Description: Steel Column Flange Cleat Angle (typical)	**Photo Location:** Lake Street

Damen Green Line Station Lake St. and Damen Ave. Chicago, Illinois	GSG Consultants, Inc. 2942 W. Van Buren St., Suite 200 Chicago, IL. 60612	**Date:** August 3, 2018

Description: Steel Column Cover Plate (typical)	**Photo Location:** Lake Street

Damen Green Line Station Lake St. and Damen Ave. Chicago, Illinois	GSG Consultants, Inc. 2942 W. Van Buren St., Suite 200 Chicago, IL. 60612	**Date:** August 3, 2018

APPENDIX C

XRF Performance Characteristic Sheets

Performance Characteristic Sheet

EFFECTIVE DATE: **October 25, 2006** **EDITION NO.: 5**

MANUFACTURER AND MODEL:

Make: ***Radiation Monitoring Devices***
Model: ***LPA-1***
Source: ^{57}Co
Note: This sheet supersedes all previous sheets for the XRF instrument of the make, model, and source shown above ***for instruments sold or serviced after June 26, 1995. For other instruments, see prior editions.***

FIELD OPERATION GUIDANCE

OPERATING PARAMETERS:

Quick mode or 30-second equivalent standard (Time Corrected) mode readings.

XRF CALIBRATION CHECK LIMITS:

0.7 to 1.3 mg/cm^2 (inclusive)

SUBSTRATE CORRECTION:

For XRF results below 4.0 mg/cm^2, substrate correction is recommended for:

Metal using 30-second equivalent standard (Time Corrected) mode readings.
None using quick mode readings.

Substrate correction is not needed for:

Brick, Concrete, Drywall, Plaster, and Wood using 30-second equivalent standard (Time Corrected) mode readings
Brick, Concrete, Drywall, Metal, Plaster, and Wood using quick mode readings

THRESHOLDS:

30-SECOND EQUIVALENT STANDARD MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Results corrected for substrate bias on metal substrate only	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	0.9
	Plaster	1.0
	Wood	1.0

QUICK MODE READING DESCRIPTION	SUBSTRATE	THRESHOLD (mg/cm^2)
Readings not corrected for substrate bias on any substrate	Brick	1.0
	Concrete	1.0
	Drywall	1.0
	Metal	1.0
	Plaster	1.0
	Wood	1.0

BACKGROUND INFORMATION

EVALUATION DATA SOURCE AND DATE:

This sheet is supplemental information to be used in conjunction with Chapter 7 of the HUD *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing* ("HUD Guidelines"). Performance parameters shown on this sheet are calculated from the EPA/HUD evaluation using archived building components. Testing was conducted on approximately 150 test locations in July 1995. The instrument that performed testing in September had a new source installed in June 1995 with 12 mCi initial strength.

OPERATING PARAMETERS:

Performance parameters shown in this sheet are applicable only when properly operating the instrument using the manufacturer's instructions and procedures described in Chapter 7 of the HUD Guidelines.

XRF CALIBRATION CHECK:

The calibration of the XRF instrument should be checked using the paint film nearest 1.0 mg/cm^2 in the NIST Standard Reference Material (SRM) used (e.g., for NIST SRM 2579, use the 1.02 mg/cm^2 film).

If readings are outside the acceptable calibration check range, follow the manufacturer's instructions to bring the instruments into control before XRF testing proceeds.

SUBSTRATE CORRECTION VALUE COMPUTATION:

Chapter 7 of the HUD Guidelines provides guidance on correcting XRF results for substrate bias. Supplemental guidance for using the paint film nearest 1.0 mg/cm^2 for substrate correction is provided:

XRF results are corrected for substrate bias by subtracting from each XRF result a correction value determined separately in each house for single-family housing or in each development for multifamily housing, for each substrate. The correction value is an average of XRF readings taken over the NIST SRM paint film nearest to 1.02 mg/cm^2 at test locations that have been scraped bare of their paint covering. Compute the correction values as follows:

> Using the same XRF instrument, take three readings on a bare substrate area covered with the NIST SRM paint film nearest 1 mg/cm^2. Repeat this procedure by taking three more readings on a second bare substrate area of the same substrate covered with the NIST SRM.
>
> Compute the correction value for each substrate type where XRF readings indicate substrate correction is needed by computing the average of all six readings as shown below.
>
> For each substrate type (the 1.02 mg/cm^2 NIST SRM is shown in this example; use the actual lead loading of the NIST SRM used for substrate correction):
>
> Correction value = (1^{st} + 2^{nd} + 3^{rd} + 4^{th} + 5^{th} + 6^{th} *Reading*) / 6 - 1.02 mg/cm²
>
> Repeat this procedure for each substrate requiring substrate correction in the house or housing development.

EVALUATING THE QUALITY OF XRF TESTING:

Randomly select ten testing combinations for retesting from each house or from two randomly selected units in multifamily housing. Use either the Quick Mode or 30-second equivalent standard (Time Corrected) Mode readings.

Conduct XRF re-testing at the ten testing combinations selected for retesting.

Determine if the XRF testing in the units or house passed or failed the test by applying the steps below.

Compute the Retest Tolerance Limit by the following steps:

Determine XRF results for the original and retest XRF readings. Do not correct the original or retest results for substrate bias. In single-family and multi-family housing, a result is defined as a single reading. Therefore, there will be ten original and ten retest XRF results for each house or for the two selected units.

Calculate the average of the original XRF result and retest XRF result for each testing combination.

Square the average for each testing combination.

Add the ten squared averages together. Call this quantity C.

Multiply the number C by 0.0072. Call this quantity D.

Add the number 0.032 to D. Call this quantity E.

Take the square root of E. Call this quantity F.

Multiply F by 1.645. The result is the Retest Tolerance Limit.

Compute the average of all ten original XRF results.

Compute the average of all ten re-test XRF results.

Find the absolute difference of the two averages.

If the difference is less than the Retest Tolerance Limit, the inspection has passed the retest. If the difference of the overall averages equals or exceeds the Retest Tolerance Limit, this procedure should be repeated with ten new testing combinations. If the difference of the overall averages is equal to or greater than the Retest Tolerance Limit a second time, then the inspection should be considered deficient.

Use of this procedure is estimated to produce a spurious result approximately 1% of the time. That is, results of this procedure will call for further examination when no examination is warranted in approximately 1 out of 100 dwelling units tested.

BIAS AND PRECISION:

Do not use these bias and precision data to correct for substrate bias. These bias and precision data were computed without substrate correction from samples with reported laboratory results less than 4.0 mg/cm^2 lead. The data which were used to determine the bias and precision estimates given in the table below have the following properties. During the July 1995 testing, there were 15 test locations with a laboratory-reported result equal to or greater than 4.0 mg/cm^2 lead. Of these, one 30-second standard mode reading was less than 1.0 mg/cm^2 and none of the quick mode readings were less than 1.0 mg/cm^2. The instrument that tested in July is representative of instruments sold or serviced after June 26, 1995. These data are for illustrative purposes only. Actual bias must be determined on the site. Results provided above already account for bias and precision. Bias and precision ranges are provided to show the variability found between machines of the same model.

30-SECOND STANDARD MODE READING MEASURED AT	SUBSTRATE	BIAS (mg/cm^2)	PRECISION* (mg/cm^2)
0.0 mg/cm^2	Brick	0.0	0.1
	Concrete	0.0	0.1
	Drywall	0.1	0.1
	Metal	0.3	0.1
	Plaster	0.1	0.1
	Wood	0.0	0.1
0.5 mg/cm^2	Brick	0.0	0.2
	Concrete	0.0	0.2
	Drywall	0.0	0.2
	Metal	0.2	0.2
	Plaster	0.0	0.2
	Wood	0.0	0.2
1.0 mg/cm^2	Brick	0.0	0.3
	Concrete	0.0	0.3
	Drywall	0.0	0.3
	Metal	0.2	0.3
	Plaster	0.0	0.3
	Wood	0.0	0.3
2.0 mg/cm^2	Brick	-0.1	0.4
	Concrete	-0.1	0.4
	Drywall	-0.1	0.4
	Metal	0.1	0.4
	Plaster	-0.1	0.4
	Wood	-0.1	0.4

*Precision at 1 standard deviation.

CLASSIFICATION RESULTS:

XRF results are classified as positive if they are greater than the upper boundary of the inconclusive range, and negative if they are less than the lower boundary of the inconclusive range, or inconclusive if in between. The inconclusive range includes both its upper and lower bounds. Earlier editions of this *XRF Performance Characteristics Sheet* did not include both bounds of the inconclusive range as "inconclusive." While this edition of the Performance Characteristics Sheet uses a different system, the specific XRF readings that are considered positive, negative, or inconclusive for a given XRF model and substrate remain unchanged, so previous inspection results are not affected.

DOCUMENTATION:

An EPA document titled *Methodology for XRF Performance Characteristic Sheets* provides an explanation of the statistical methodology used to construct the data in the sheets, and provides empirical results from using the recommended inconclusive ranges or thresholds for specific XRF instruments. For a copy of this document call the National Lead Information Center Clearinghouse at 1-800-424-LEAD. A HUD document titled *A Nonparametric Method for Estimating the 5th and 95th Percentile Curves of Variable-Time XRF Readings Based on Monotone Regression* provides supplemental information on the methodology for variable-time XRF instruments. A copy of this document can be obtained from the HUD lead web site, www.hud.gov/offices/lead.

This XRF Performance Characteristic Sheet was developed by QuanTech, Inc., under a contract from the U.S. Department of Housing and Urban Development (HUD). HUD has determined that the information provided here is acceptable when used as guidance in conjunction with Chapter 7, Lead-Based Paint Inspection, of HUD's *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*.

APPENDIX D

Lead Inspector License and Certification

IDPH
ILLINOIS DEPARTMENT OF PUBLIC HEALTH

525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • www.dph.illinois.gov

2/7/2018

LICENSE NUMBER: 003649
Roberto Rivera
2942 W. VanBuren Street
Chicago, IL 60612

LICENSE APPROVED

IDPH recently received and reviewed your application for lead licensure. Your qualifications have been reviewed and found that you meet the requirements set forth by the Lead Poisoning Prevention Code, Section 845.125. Therefore, your application for lead licensure is now complete. Enclosed please find your lead license card. Please have this identification card with you at all times while conducting lead abatement activities.

IDPH has updated its 7 – Day Notice of Commencement effective immediately. The revised document can be identified by its 9/16 revision date on the bottom left corner. Please discontinue using the old form and begin using the new form as soon as possible. The revised form is located in the same web address that the old form was located (http://www.dph.illinois.gov/sites/default/files/forms/7-day-notice-leadabatement-mitigation-project-091916.pdf).

IDPH
ILLINOIS DEPARTMENT OF PUBLIC HEALTH

525-535 West Jefferson Street • Springfield, Illinois 62761-0001 • www.dph.illinois.gov

2/7/2018

LICENSE NUMBER: 003649
Roberto Rivera
2942 W. VanBuren Street
Chicago, IL 60612

LICENSE APPROVED

IDPH recently received and reviewed your application for lead licensure. Your qualifications have been reviewed and found that you meet the requirements set forth by the Lead Poisoning Prevention Code, Section 845.125. Therefore, your application for lead licensure is now complete. Enclosed please find your lead license card. Please have this identification card with you at all times while conducting lead abatement activities.

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Alteration of this license shall result in legal action
RISK ASSESSOR CERTIFICATE EXPIRES
12/7/2019
This license issued under authority of the State of Illinois -Department of Public Health
This license is valid only when accompanied by a valid training course certificate
If found return to 525 W.Jefferson St Springfield, IL 62761

2016

OCCUPATIONAL TRAINING & SUPPLY, INC.

7233 S. Adams Street ♦ Willowbrook, IL 60527 ♦ (630) 655-3900

Lead Risk Assessor Refresher

Occupational Training & Supply, Inc. certifies that

Roberto Rivera

has successfully completed the Lead Risk Assessor Refresher course and has passed the competency exam with a minimum score of 70%. This course is accredited by the Illinois Department of Public Health in accordance with the Illinois Lead Poisoning Prevention Code.

Course Date: 12/7/2016

Exam Date: 12/7/2016

Expiration Date: 12/7/2019

Certificate Number: LRAR1612074244

Kathy DeSalvo, Director

CAPITOL CEMENT COMPANY, INC.
CONCRETE CONTRACTORS
ESTAB. 1914
6231 NORTH PULASKI ROAD, CHICAGO, ILLINOIS 60646
TELEPHONE (773) 478-2200
FAX (773) 478-4646

December 18, 2018

Letter #047

Daniel Burke, P.E., S.E.
Deputy Commissioner
Chicago Department of Transportation
Division of Engineering
30 North LaSalle Street, Suite 400
Chicago, IL 60602

Attn: Bridget Stalla, Project Manager

Re: Lake Street Reconstruction
Damen Ave to Ashland Avenue
C.D.O.T No.: B-4-118
Specification No.: 215456

Mrs. Stalla:

As of Tuesday, December 18th, Capitol is transferring ownership of the shoring tower material to the City of Chicago. Per the agreed and accepted proposal, the shoring tower material has been placed on an elevated mud slab, enclosed with an 8' chain link fence, and tarped. The remaining small pieces which are possibly subject to theft have been stored at Capitol Cement's yard (6214 N. Pulaski Road). The inventory list of what is at Capitol's yard is included, along with photographs. We are also including photographs of the material, which is at Lake Street & Damen Avenue. Please advise if you need anything further from Capitol and/or Metropolitan Steel on this issue.

Sincerely,
CAPITOL CEMENT COMPANY, INC.

Dan Melnyk
Vice President

List of all material Metropolitan Steel will sell as lump sum per the above price options:

Note: All material will be provide in "as-is" condition.

SEE PICTURE NUMBERS

Four (4) towers; EACH tower consisting of the following items (multiply times 4 for total quantity):

- (2) – W12x96 base beams 13'-1/4" long
- (4) – W12x96 columns 6'-3-5/8" long
- (4) – Angles 4"x4"x1/2" x 8'-7"+/- long that provide the 2 vertical "X" braces
- (4) – Angles 4"x4"x1/2 x 8'-0" +/- long that provide the 2 vertical diagonal angle braces
- (2) – W12x136 top beams 9'-0" +/- long
- (3) – W24x131 jacking beams 9'-0" +/- long
- (2) – W18x86 top jacking beams 9'-0" +/- long (Phase 1 only)

1 & 2 → (2) – T-angle gusset assembly to attach to W24x131 (Phase 1 only)

(1) – lot of shop welded gusset plates, stiffener plates all shop attached

3, 4 & 5 → (4) – Angles 3-1/2"x3-1/2"x1/2" x 3'+/- long back-to-back angles with upper gusset plate (Phase 1).
Note; four (4) of the gusset plates were welded to the stiffener angles and others will need to replace if necessary at no additional cost to MSI.

3, 4 & 5 → (6) – Angles 3-1/2"x3-1/2"x1/2" x 4'+/- long back-to-back angles with upper gusset plate (Phase 2).

(1) – Lot black A325 shop & field bolts *(assume all bolts pre-tensioned twice, others may need to replace, if necessary, at no additional cost to MSI).*

Grillage Beams: Shown on S2.0 thru S2.2 and detail 7/S3.1

(16) – W12x96 grillage beams, 16'-0" long. *Note: The grillage beams were originally fabricated as eight (8) 32' long beams for use Phase 1 shoring towers. After the Phase 1 work was complete the 32'-0" long beams were cut in half to allow for the (16) 16'-0" long W12x96 grillage beams for Phase 2.*

Hardwood Mats & Timber:

(16) – Nominal size 12" x 48" x 16'-0" standard hardwood timber mats

(4) - Nominal size 12" x 12" x 16'-0" standard hardwood timber

Note: Material may contain snapped lag bolts due to the inability in removing the lag bolts from the disassembly of Stage 2 shoring. (Others may need to replace at no additional cost to MSI.)

Lag Bolts:

Picture 6 → (500+/-) Approximate quantity of the standard 7/8" diameter x 9" long Hex Head Lag Bolts.

Note: Some of the lag bolts may have rounded heads due to the challenges of removing the lag bolts from the disassembly of Stage 2 shoring. (Others may need to replace at no additional cost to MSI.)

Terms & Conditions:

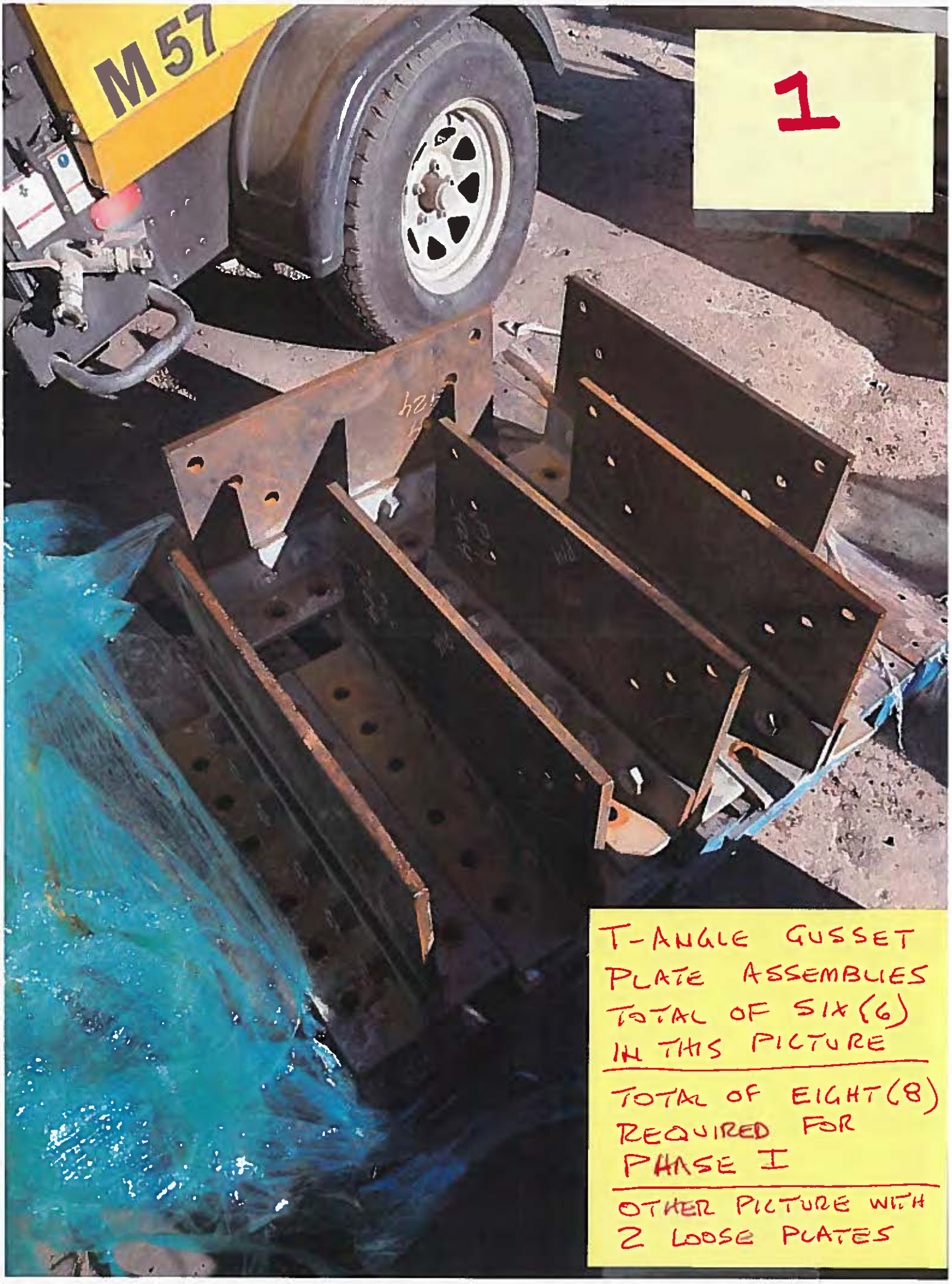
1. This change order becomes part of and in conformance with the original contract / purchase order.
2. All other terms and conditions of the original contract / purchase order remain in effect.
3. This extra work to take place during straight time & OT hours in sequence with other contract work.
4. Testing, inspections, CTA flaggers and traffic control shall be by others (not by MSI).
5. All touch-up and finish painting by others (not by MSI).
6. The 100-Ton jacks, pumps and hoses were rented items and are EXCLUDED in the above purchase agreement.
7. All shim plates, stools and other secondary items are EXCLUDED in the above purchase agreement.
8. Based on all material provided in "as-is" condition (No additional replacement cost to MSI.)
9. MSI reserves and the right to adjust/modify the pricing based on scope or sequence changes.

Metropolitan Steel, Inc.

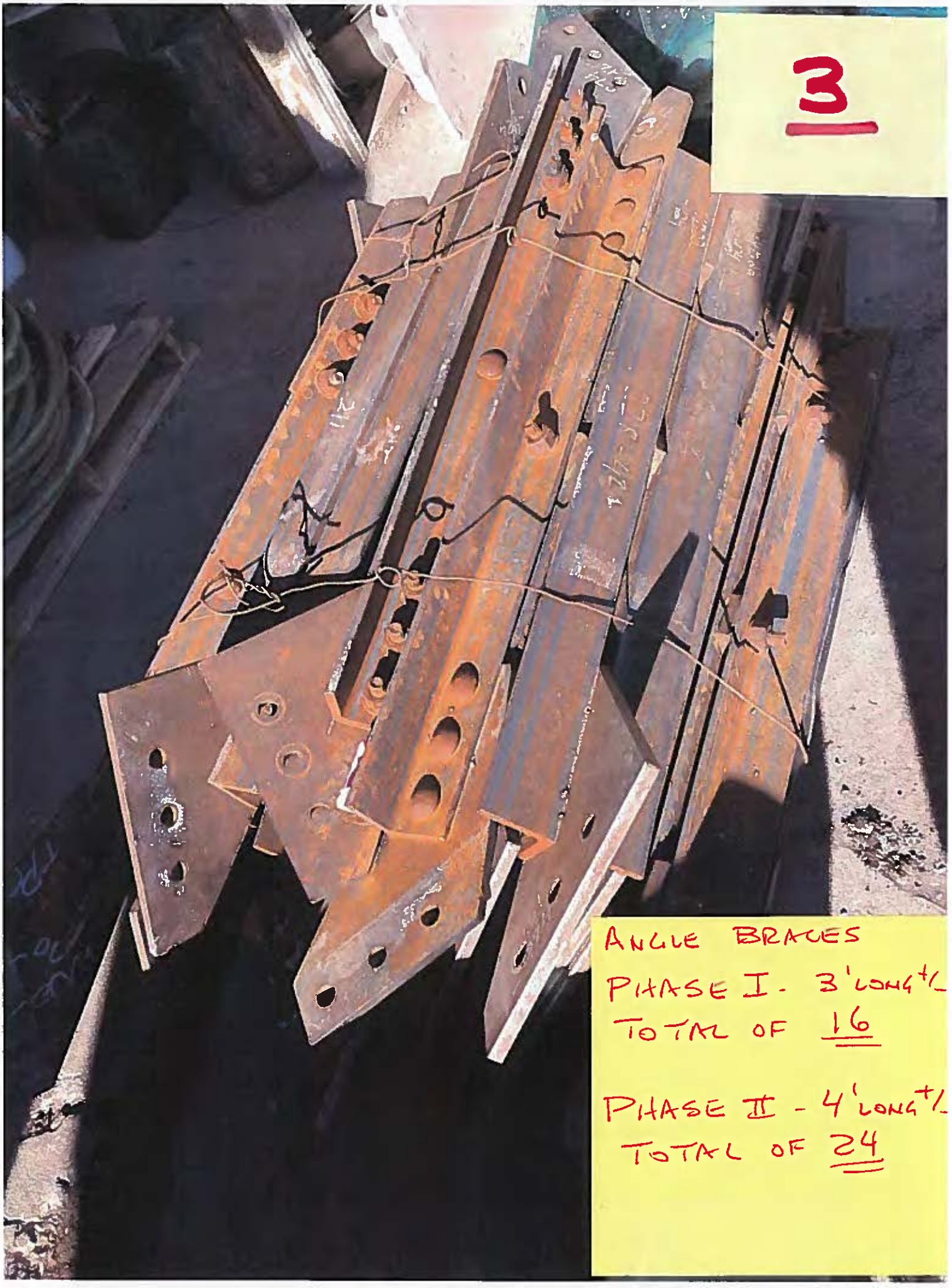
Dave Budzius
Project Manager

Attachment: Field Order #27, dated 09/20/18 (1-page)

cc. File


M 57
1
T-ANGLE GUSSET PLATE ASSEMBLIES TOTAL OF SIX (6) IN THIS PICTURE
TOTAL OF EIGHT (8) REQUIRED FOR PHASE I
OTHER PICTURE WITH 2 LOOSE PLATES

2
T-ANGLE GUSSET PLAT ASSEMBLED LOOSE PLATES ONLY IN PICTURE
NOTE: THE FOUR(4) ANGLES FOR THE T-ANGLE ASSEMBLY ARE ON THE TWO W24x131 BEAMS

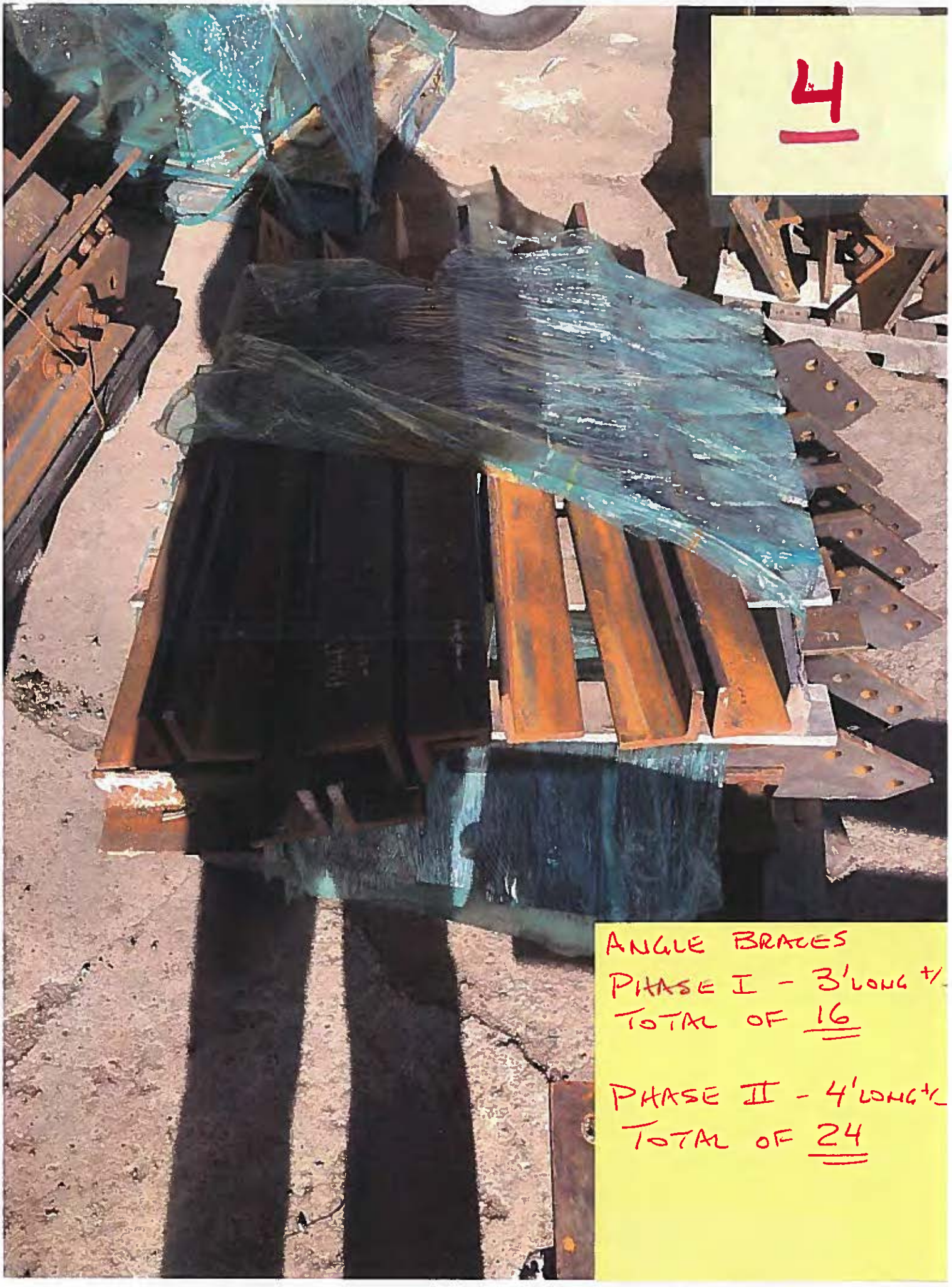


3

ANGLE BRACES

PHASE I. 3' LONG +/-
TOTAL OF 16

PHASE II - 4' LONG +/-
TOTAL OF 24



4

ANGLE BRACES
PHASE I - 3' LONG +/-
TOTAL OF 16

PHASE II - 4' LONG +/-
TOTAL OF 24

5

ANGLE BRACES
PHASE I - 3' LONG +/-
TOTAL OF 16

ANGLE BRACES
PHASE II - 4' LONG +/-
TOTAL OF 24

Picture 6

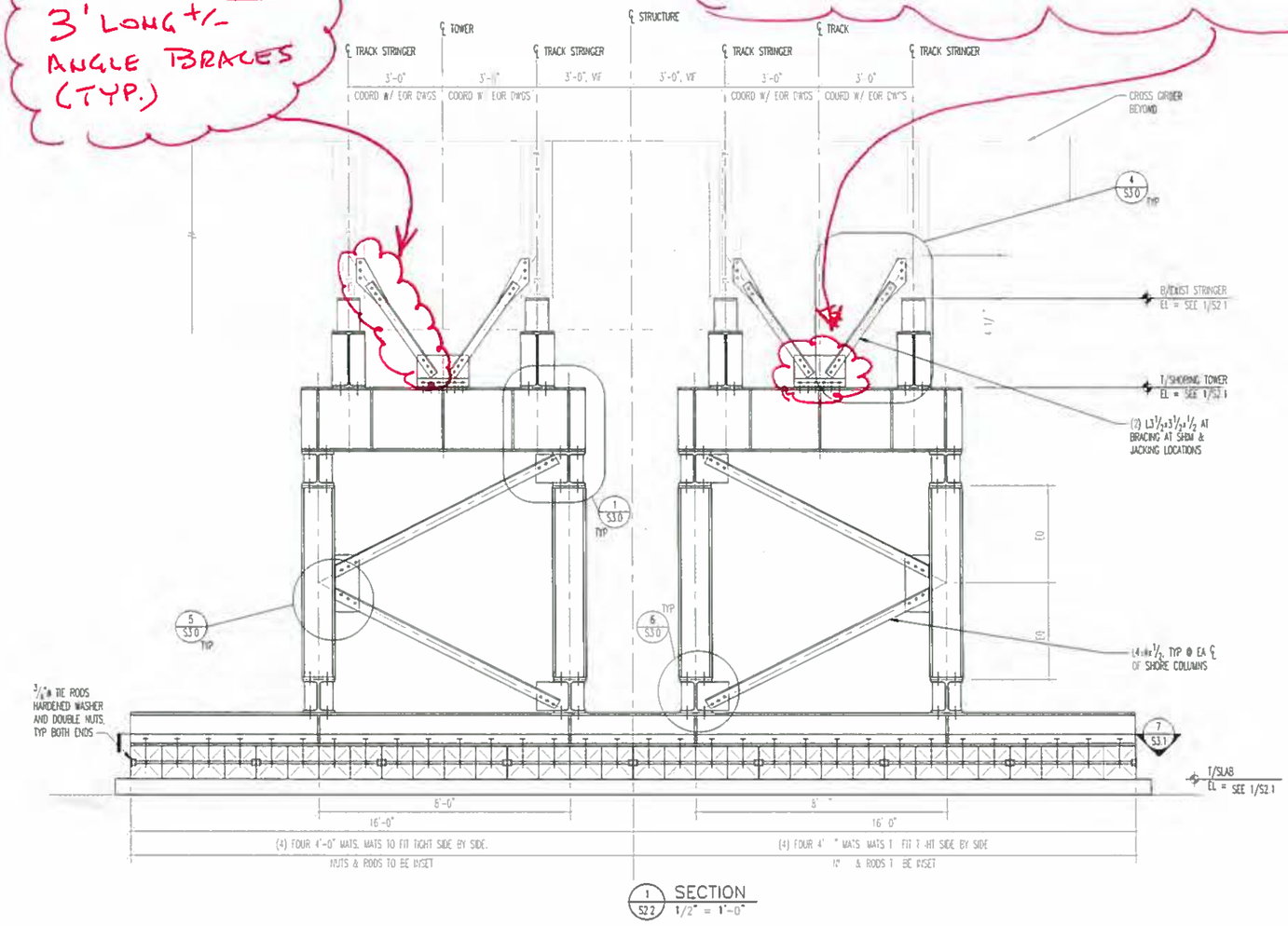
Lag bolts

PHASE I - TRACK STRINGER SHORING
FOUR (4) TOWERS

SEE PICTURES OF THE 16 3' LONG +/- ANGLE BRACES (TYP.)

SEE PICTURES OF T-ANGLE GUSSET PLATE ASSEMBLIES AND LOOSE PLATES

TOTAL OF EIGHT (8) T-ANGLE GUSSET ASSEMBLIES FOR PHASE I



1/S2.2 SECTION
1/2" = 1'-0"

1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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METROPOLITAN STEEL INC.
1931 EAST 177TH ST
LANSING, IL 60438

TEMPORARY SHORING FOR CTA GREENLINE STATION
LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

SEAL
ANGELO DELLANGELO 081-007232 STATE OF ILLINOIS
Date 05/03/2018 Expires 11/30/2018
IL Design Firm # 184-001442

No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project # 21180240.000
Drawn by: KAR
Checked by: RAF

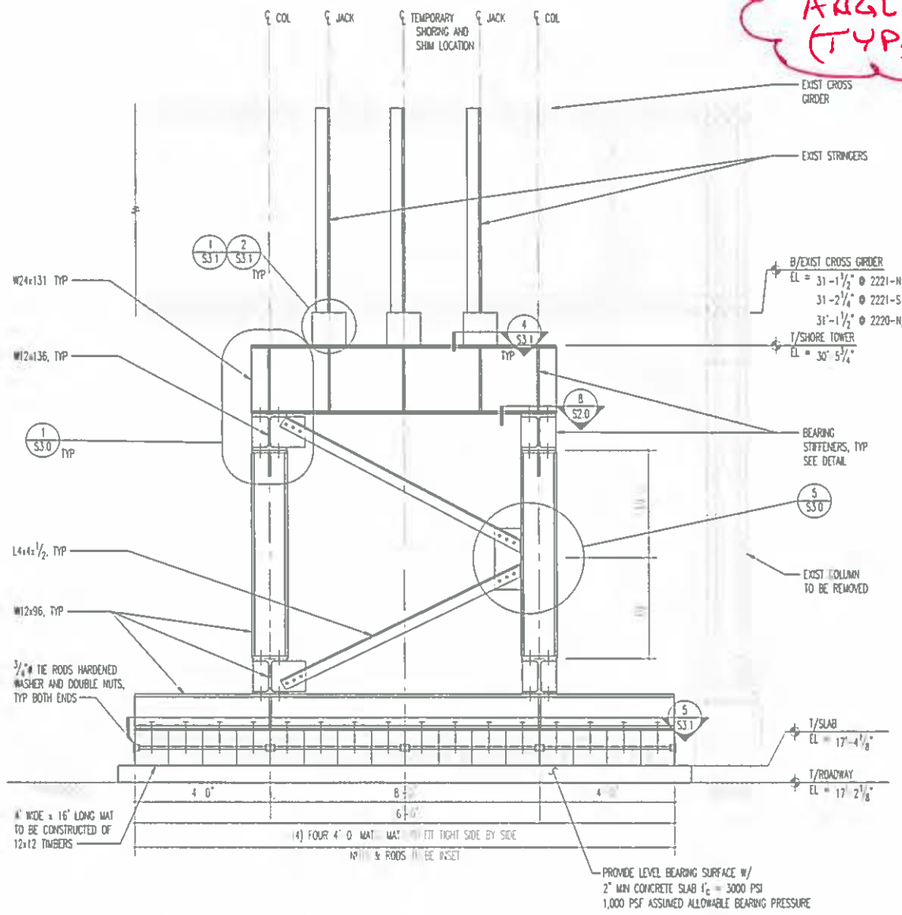
Sheet Title
PHASE 1
SHORING TOWER SECTIONS

S2.2

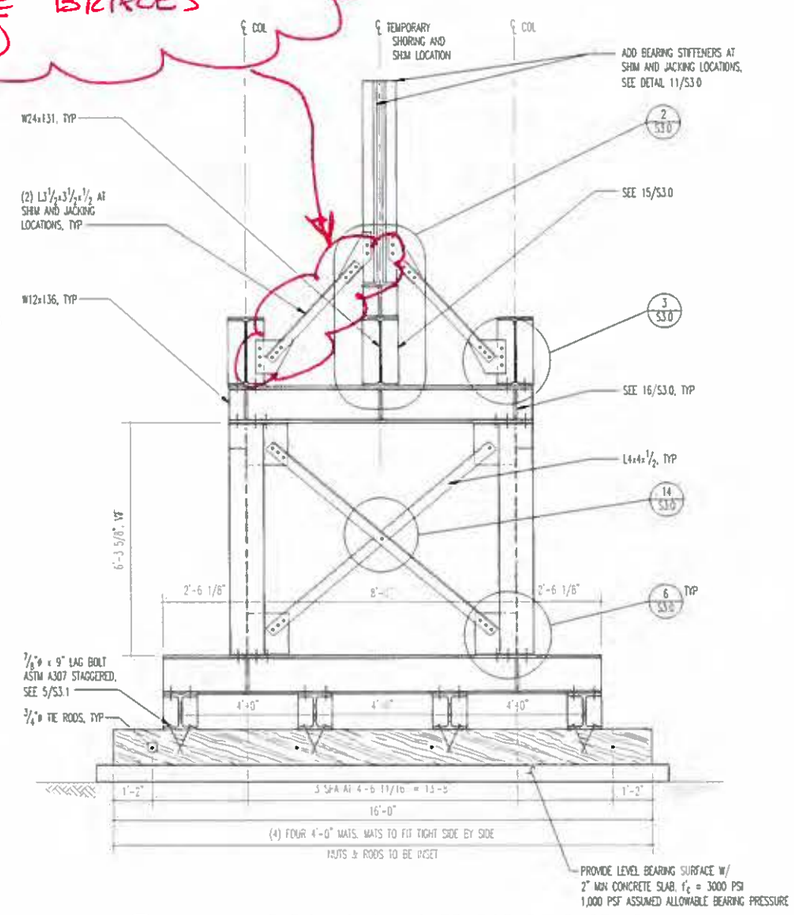
Structural Sheet 5 of 7

PHASE II - BENT GIRDER SHORING FOUR (4) TOWERS

SEE PICTURES OF THE 24 4' LONG +/- ANGLE BRACES (TYP.)



1 S2.0 TYPICAL SECTION SHOWING TEMPORARY SHORING
1/2" = 1'-0"



2 S2.0 TYPICAL SECTION SHOWING TEMPORARY SHORING
1/2" = 1'-0"

1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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ADAM R. DELLANGELO 081-007232 STATE OF ILLINOIS
Date 05/03/2018 Expires 11/30/2018
IL Design Firm # 184-001442

No	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project# 21180240.000
Drawn by KRR
Checked by RAF

Sheet Title
PHASE 2
SHORING TOWER SECTIONS

S2.0

Structural Sheet 3 of 7

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

30 N. LASALLE ST., SUITE 400
CHICAGO, IL 60602

Number: 1012
Date: 12/7/2018

TO: Dan Melnyk
Project Manager
Capitol Cement Company, Inc.
6231 N. Pulaski
Chicago, IL 60646

PROJECT: Lake Street Reconstruction - Damen to Ashland
B-4-118

REFERENCE

Capitol Cement Company, Inc. Letter No. 45, dated November 15, 2018, regarding the cost proposal to salvage and transfer ownership of shoring towers.

DISPOSITION

We have reviewed and accept your cost proposal to salvage and transfer ownership of four shoring towers and parts for the lump sum price of $139,739.81. Small pieces will be stored at Capitol Cement's yard and delivered to the job site on a date that will be determined at a later time. This work will be paid under Proposed Contract Modification No. 11.

for Daniel Burke, P.E., S.E.
Deputy Commissioner/Chief Engineer

cc: B. Stalla
M. Pakshir (R&E)
CCE File (Knight E/A)

CAPITOL CEMENT COMPANY, INC.
CONCRETE CONTRACTORS
ESTAB. 1914
6231 NORTH PULASKI ROAD, CHICAGO, ILLINOIS 60646
TELEPHONE (773) 478-2200
FAX (773) 478-4646

November 15, 2018 Letter #045

Daniel Burke, P.E., S.E.
Deputy Commissioner
Chicago Department of Transportation
Division of Engineering
30 North LaSalle Street, Suite 400
Chicago, IL 60602

Attn: Bridget Stalla, Project Manager

Re: Lake Street Reconstruction
Damen Ave to Ashland Avenue
C.D.O.T No.: B-4-118
Specification No.: 215456

Mrs. Stalla:

Please see the attached proposal for Owner purchase of MSI shoring towers and parts, according to FO #27.

Please note, per the attached proposal towers and materials will remain on-site.

The price for the proposed work is $139,739.81.

FYI, small pieces which could be carried away by hand will be stored at Capitol Cement's yard at no additional charge.

Please let us know if any of this price is acceptable.

Sincerely,
CAPITOL CEMENT COMPANY, INC.

Dan Melnyk
Vice President

FIELD ORDER

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

Field Order Number: 49
Date: 12/7/2018
Project Name: Lake Street Reconstruction - Damen to Ashland
Project Number: B-4-118
To: Capitol Cement Company, Inc.

You are hereby directed to comply with the following:

DESCRIPTION

Compensate the contractor to salvage and transfer ownership of four temporary shoring towers to the City to be utilized on a subsequent project at Damen Avenue and Lake Street.

REASON

The temporary shoring tower system design is the same as the future CDOT Green Line Station project and salvaging the towers for the subsequent project is more cost effective than including the work in that contract and will save the City money overall.

cc: C. Chan
CCE File (Knight EA)

X Contract Modification
__ Line Item Change
__ No Cost
__ Other

For Kenneth Thomas
Resident Engineer

29 November 2018

Mr. Matthew Kuhl
Senior Project Manager, Associate Principal
Perkins+Will
410 North Michigan Avenue, Suite 1600
Chicago, IL 60611

Project 180427 – Structural Engineering Services for Damen Green Line Station, Chicago, IL

Re: Field Observation of Temporary Shoring Towers

Dear Mr. Kuhl:

At the request of the Chicago Department of Transportation (CDOT), we have reviewed the general condition of the existing temporary shoring towers proposed for re-use on the Damen Green Line Station Project. Recall that these towers were used by Metropolitan Steel this past summer to temporarily support Chicago Transit Authority (CTA) bent girders over Damen Avenue along the Green Line portion of the tracks.

BACKGROUND

Modifications were recently made to the existing track structure of the CTA Green Line at intersection of Damen Avenue and Lake Street, as part of the Lake Street Improvement project. The modifications included the installation of two new longitudinal girders over the Damen Avenue intersection and demolition of the existing columns supporting the two bent girders adjacent to the intersection. Four temporary shoring towers were used to support the existing bent girders during column demolition and remained in place until the bent girders were supported on the new longitudinal girders.

These shoring towers were purchased by CDOT for the current project. SGH was asked to review and document the present conditions of the shoring.

SGH reviewed drawings for the shoring towers titled “Temporary Shoring for CTA Green Line Station Lake Street,” as prepared Larson Engineering, Inc., and dated 5 May 2018, prior to reviewing the condition of the shoring towers in the field. The drawings are attached as Appendix A for reference.

An email from Dan Melnyk of Capitol Cement Co. dated 1 November 2018 noted that small pieces of the shoring tower assembly, including the angle braces, the shallow-depth top beams used for Bent 2219 work, the wood lag bolts used to attach the shoring towers to the timber cribbing, and other hardware, are being stored at Metropolitan Steel’s yard in Lansing, Illinois. The email can be found in Appendix B. We presume that all of these pieces will be returned to the site in time

for the start of the future Damen Green Line station project in good condition (meaning no repair or restoration to the components stored offsite will be required).

OBSERVATIONS

Neal Anderson and Corey Aumiller visited the storage site at Damen Avenue and Lake Street on 20 November 2018. The shoring towers are currently being stored in the vacant lot in the southwest corner of the intersection. General condition photographs of the shoring can be found in Appendix C. SGH observed the following:

- The steel framing of the shoring towers is in generally good condition and is consistent with the shoring tower drawings.
    - The steel framing of the shoring towers is partially assembled and supported directly on the ground (Photos 1 and 2).
    - The top W24s and the bottom W12s are unassembled from the steel tower frame and stored on wood dunnage (Photos 3 and 4).
    - Minor surface rust is present on the unpainted faying surfaces of the angle brace connections of the shoring tower (Photo 5).
- The timber cribbing of the shoring towers is in generally good condition and consistent with the shoring tower drawings.
    - The cribbing was assembled into panels of four 12x12 pieces of timber tied together with tie rods. The cribbing panels were supported on dunnage above the ground and on dunnage above the W12s (Photos 4 and 6)

RECOMMENDATIONS

We recommend the following measures while the shoring is being stored until its later use. We presume these measures were previously agreed to by Metropolitan Steel.

- Provide a temporary fence around the partially assembled shoring towers and unattached materials. We presume this was agreed upon by Metropolitan Steel.
- Provide a tarpaulin over the partially assembled shoring towers and unattached materials to protect them from the weather.
- Redirect drainage water away from the partially assembled shoring towers. This will prevent excess runoff water from collecting at the tower bases and mitigate the muddy conditions surrounding the towers. This can be done by any number of measures, including, but not limited to, placing existing steel on cribbing, placing stone backfill to a higher elevation than the adjacent ground, and placing the material on a mud slab (lean concrete) that is at a higher elevation than the adjacent ground.
- High-strength A325 bolts loosened during disassembly of the shoring towers should be discarded. New A325 bolts should be used when reassembling the full towers.

Thank you for asking SGH to review the existing conditions of the shoring purchased for the new CTA station work. Please call if you have any questions or require any additional information regarding our review.

Sincerely yours,
SIMPSON GUMPERTZ & HEGER INC.
Illinois Professional Design Firm No. 184.003981

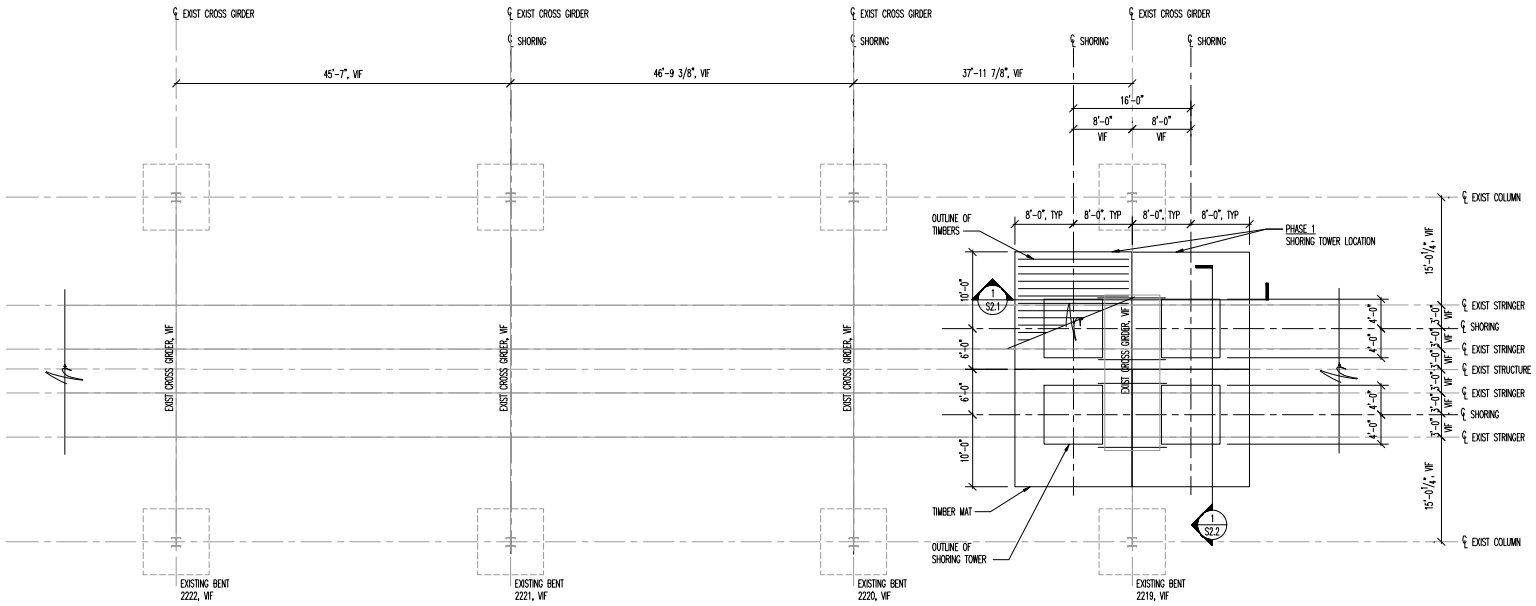
Neal S. Anderson, S.E.
Staff Consultant
IL License No. 081.004947

Corey J. Aumiller
Staff II - Structures

I:\CHI\projects\2018\180427.00-CDOT\WP\002NSAnderson-L-180427.00.ptl.docx

cc: Terry R. McDonnell S.E. – SGH
Doug Smith – P+W
Jennifer Heiney – P+W

Appendix A



1 S1.0 PHASE 1 SHORING LAYOUT PLAN
1/8" = 1'-0"

BUILDING CODES

1. CTA IDCM REV 6 AND AREMA-2018

DESIGN LOADS (PROVIDED BY EJM ENGINEERING)

1. PHASE 1 DL + LL + I = 90k PER STRINGER
2. PHASE 2 DL + LL + I = 233k

NOTE: SHORING TOWER HAS NOT BEEN DESIGNED FOR LATERAL LOADING PER AREMA-2018. PER DIRECTION FROM EOR, THE LATERAL LOAD IN THE STRUCTURE WILL BE SUPPORTED BY EXISTING STRUCTURE DURING THE TIME OF SHORING. DURING PHASE 2 COLUMNS AT BOTH BENT LINES WILL BE REMOVED. EOR TO VERIFY LATERAL STABILITY OF STRUCTURE DURING THIS TIME.

STRUCTURAL STEEL

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL MEMBERS SHALL BE IN ACCORDANCE WITH THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AS INDICATED IN THE THIRTEENTH EDITION OF THE "MANUAL OF STEEL CONSTRUCTION" FOR ALLOWABLE STRESS DESIGN UNLESS NOTED OTHERWISE.
2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING STANDARDS UNO:
   - STEEL WIDE FLANGES ASTM A992
   - STEEL ANGLES AND PLATES ASTM A36
   - STEEL SHORING TOWER ANGLES AND PLATES ASTM A572, GR. 50
3. ALL FILLER METAL USED IN WELDING SHALL BE 70 KSI YIELD, LOW-HYDROGEN.
4. ALL WELDING SHALL BE BY CERTIFIED WELDERS AND SHALL CONFORM TO THE "STRUCTURAL WELDING CODE", AWS D1.1 AND MEET AISC MINIMUM REQUIREMENTS FOR WELD SIZE.
5. FIELD CONNECTIONS ARE TO BE BOLTED AND INSTALLED IN ACCORDANCE WITH THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS." USE MIN $\frac{7}{8}$"ø SC A325 HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE. ANY HOLES DRILLED INTO EXISTING STRUCTURE OR WHERE RIVETS ARE REPLACED FOR PURPOSES OF TEMPORARY SHORING ARE TO BE FILLED W/ $\frac{7}{8}$"ø A325 GALVANIZED BOLTS AS A PERMANENT SOLUTION. BOLTS ARE TO BE FULLY TIGHTENED. SLIP CRITICAL BOLTS TO BE REPLACED AFTER BEING FULLY TENSIONED ONCE.

INSTALLATION INSTRUCTIONS:

1. PROVIDE CONCRETE JERSEY BARRIERS PROTECTION FOR ALL SHORING EXPOSED TO ALLEY OR STREET TRAFFIC. SIDEWALKS MAY NEED TO BE CLOSED AND BLOCKED OFF. JERSEY BARRIERS TO BE ANCHORED DOWN CONNECTION TO BE VERIFIED BY GENERAL CONCTRACTOR.
2. GENERAL CONTRACTOR TO PROVIDE SMOOTH AND LEVEL TEMPORARY CONCRETE PADS FOR PLACEMENT OF HARDWOOD MATS.
3. SHORING WILL BE ERECTED OVER CRANE MATS AS SHOWN ON THE PLANS AND OTHER MISC DETAIL CONNECTIONS.
4. JACKING TO TAKE PLACE DURING SHUTDOWN AND/OR BETWEEN TRAINS ONLY.
5. NO WELDING IS PERMITTED TO EXISTING STRUCTURE.
6. JACK CAPACITY TO BE 120 KIPS. JACKS TO BE CAPABLE OF MECHANICALLY LOCKING INTO PLACE SO THAT HYDRAULICS ARE NOT REQUIRED.

SHEET NOTES:

1. VERIFY DIMENSIONS AND ELEVATIONS WITH EXISTING CONDITIONS.
2. VERIFY DIMENSIONS WITH NEW WORK AT BENT LINES TO AVOID INTERFERENCES.

0 2' 4' 8' 16' 24' 1/8" = 1'-0"
0 2' 4' 8' 16' 3/16" = 1'-0"
0 1' 2' 4' 8' 12' 1/4" = 1'-0"
0 1' 2' 4' 6' 9' 3/8" = 1'-0"
0 6" 1' 2' 4' 6' 1/2" = 1'-0"
0 4" 8" 16" 32" 4' 3/4" = 1'-0"
0 3" 6" 1' 2' 3' 1" = 1'-0"
0 2" 4" 8" 16" 2' 1 1/2" = 1'-0"
0 1" 2" 4" 6" 1' 3" = 1'-0"

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TEMPORARY SHORING FOR CTA GREENLINE STATION
LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

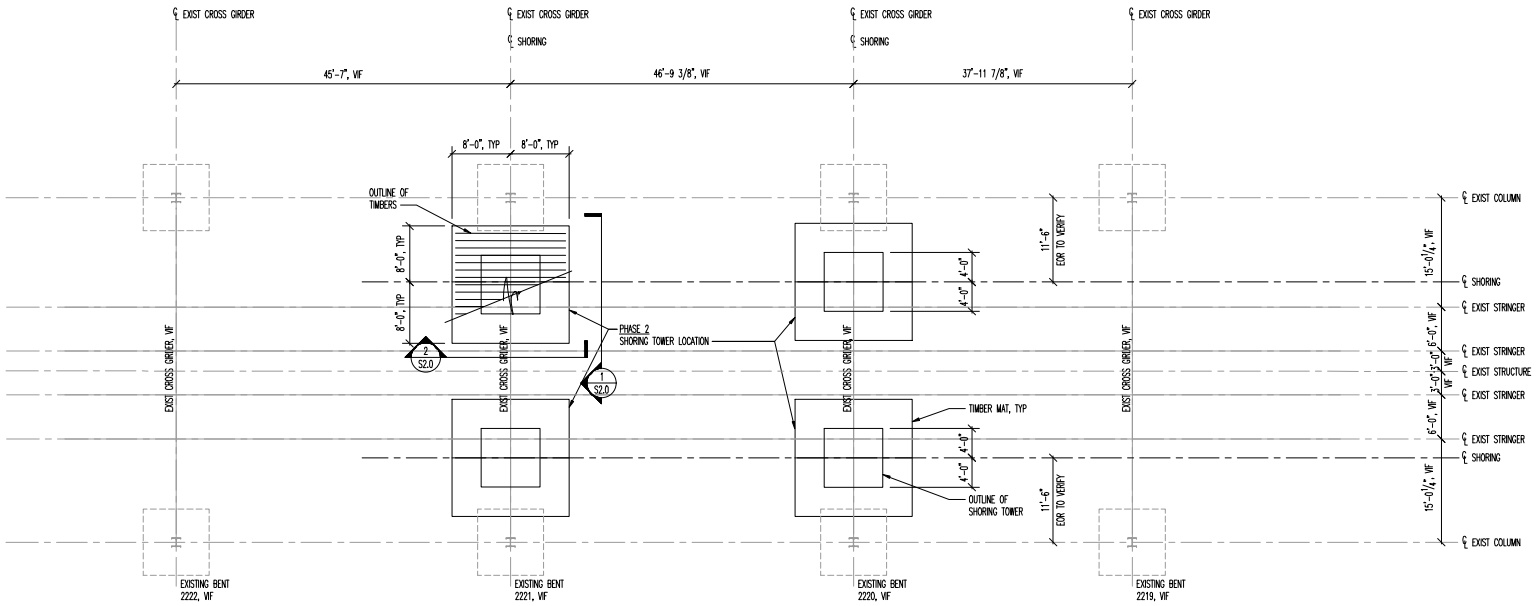
SEAL
Digitally signed by Amber Dallangelo
DN: cn=Amber Dallangelo, o=Larson Engineering, Inc, ou=DEPARTMENT OF STRUCTURAL ENGINEERING, email=adallangelo@larsonengr.com, c=US
Date: 2018.05.03 22:32:05 -05'00'
Date: 05/03/2018 Expires: 11/30/2018
IL Design Firm #: 184-001442

No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 2118D040.000
Drawn by: KRR
Checked by: RAF
Sheet Title:
PHASE 1 SHORING PLANS

S1.0

Structural Sheet: 1 of 7



1 S1.1 PHASE 2 SHORING LAYOUT PLAN
1/8" = 1'-0"

N

1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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SEAL
AMBER D. DELLANGELO
062-067998
STATE OF ILLINOIS

Date: 05/03/2018 Expires: 11/30/2018
IL Design Firm #: 184-001442

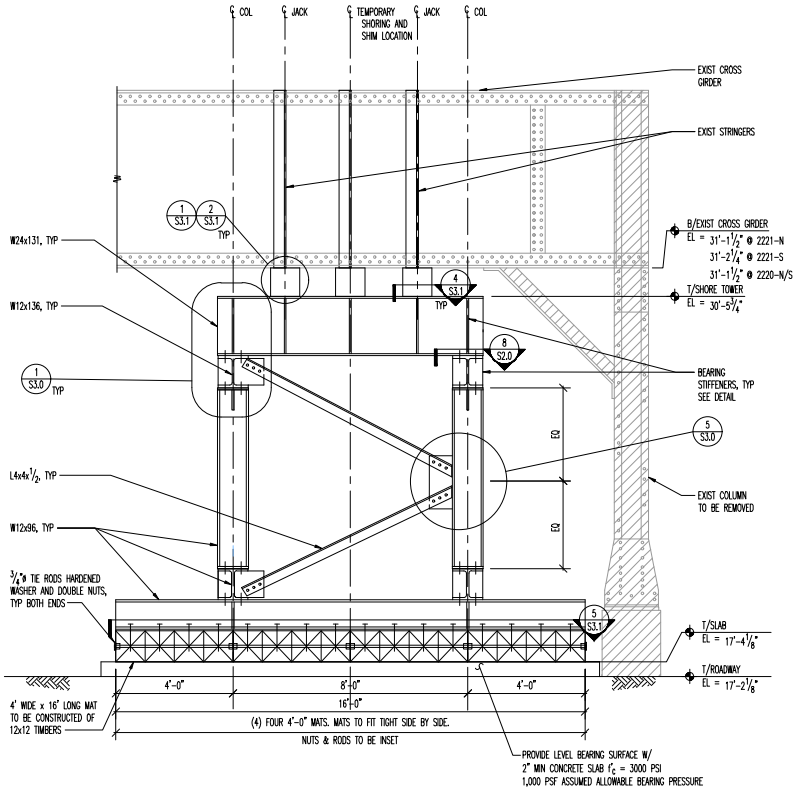
No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 2118D240.000
Drawn by: KRR
Checked by: RAF

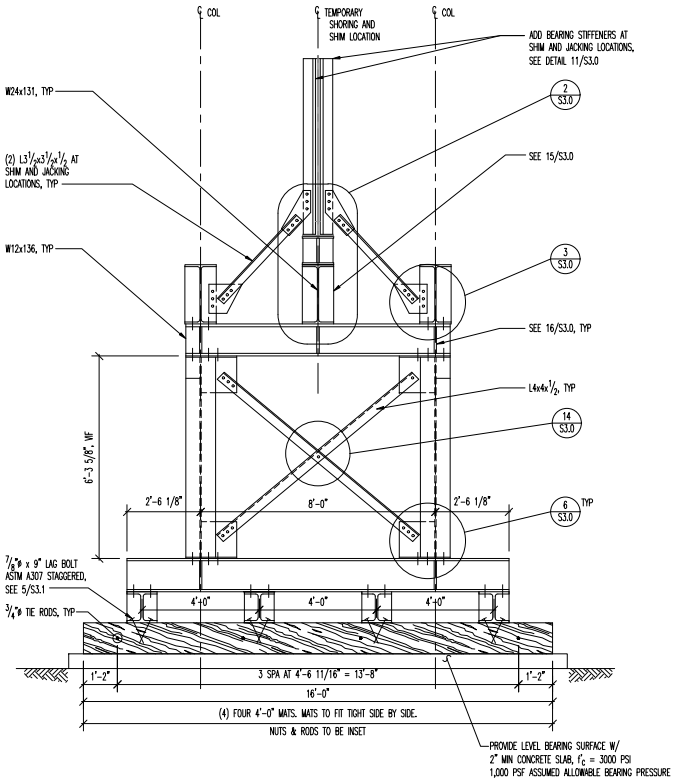
Sheet Title:
PHASE 2 SHORING PLANS

S1.1

Structural Sheet: 2 of 7



1 S2.0 TYPICAL SECTION SHOWING TEMPORARY SHORING
1/2" = 1'-0"



2 S2.0 TYPICAL SECTION SHOWING TEMPORARY SHORING
1/2" = 1'-0"

0 2' 4' 8' 16' 24'
1/8" = 1'-0"

0 2' 4' 8' 16'
3/16" = 1'-0"

0 1' 2' 4' 8' 12'
1/4" = 1'-0"

0 1' 2' 4' 6' 9'
3/8" = 1'-0"

0 6" 1' 2' 4' 6'
1/2" = 1'-0"

0 4" 8" 16" 32" 4'
3/4" = 1'-0"

0 3" 6" 1' 2' 3'
1" = 1'-0"

0 2" 4" 8" 16" 2'
1 1/2" = 1'-0"

0 1" 2" 4" 8" 1'
3" = 1'-0"

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AMBER D. DELLANGELO
062-067098
Date: 05/03/2018 Expires: 11/30/2018
IL Design Firm #: 184-001442

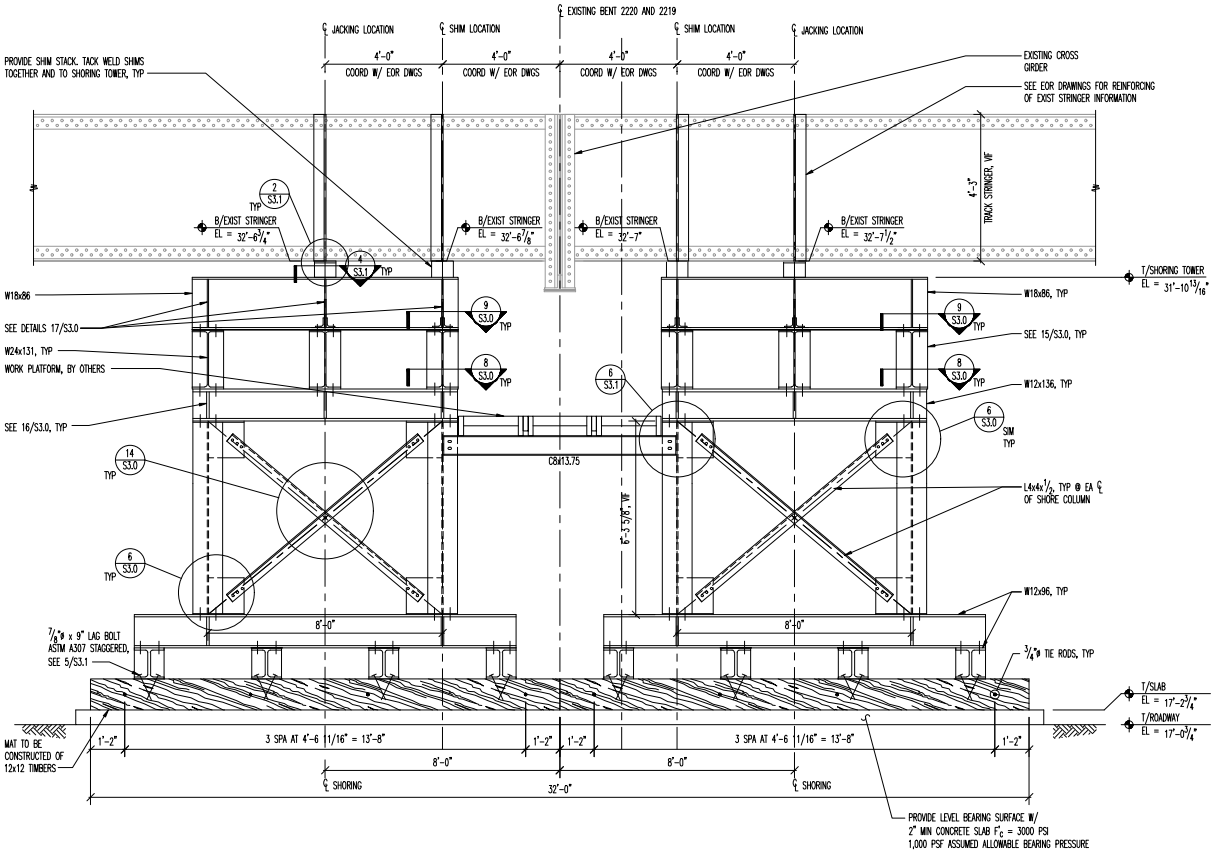
No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 2118D240.000
Drawn by: KRR
Checked by: RAF

Sheet Title:
PHASE 2
SHORING TOWER SECTIONS

S2.0

Structural Sheet: 3 of 7



1 S2.1 TYPICAL SECTION SHOWING STRINGER TEMPORARY SHORING
1/2" = 1'-0"

0 2' 4' 8' 16' 24'
1/8" = 1'-0"
0 2' 4' 8' 16'
3/16" = 1'-0"
0 1' 2' 4' 8' 12'
1/4" = 1'-0"
0 1' 2' 4' 6' 9'
3/8" = 1'-0"
0 6" 1' 2' 4' 6'
1/2" = 1'-0"
0 4" 8" 16" 32" 4'
3/4" = 1'-0"
0 3" 6" 1' 2' 3'
1" = 1'-0"
0 2" 4" 8" 16" 2'
1 1/2" = 1'-0"
0 1" 2" 4" 8" 1'
3" = 1'-0"

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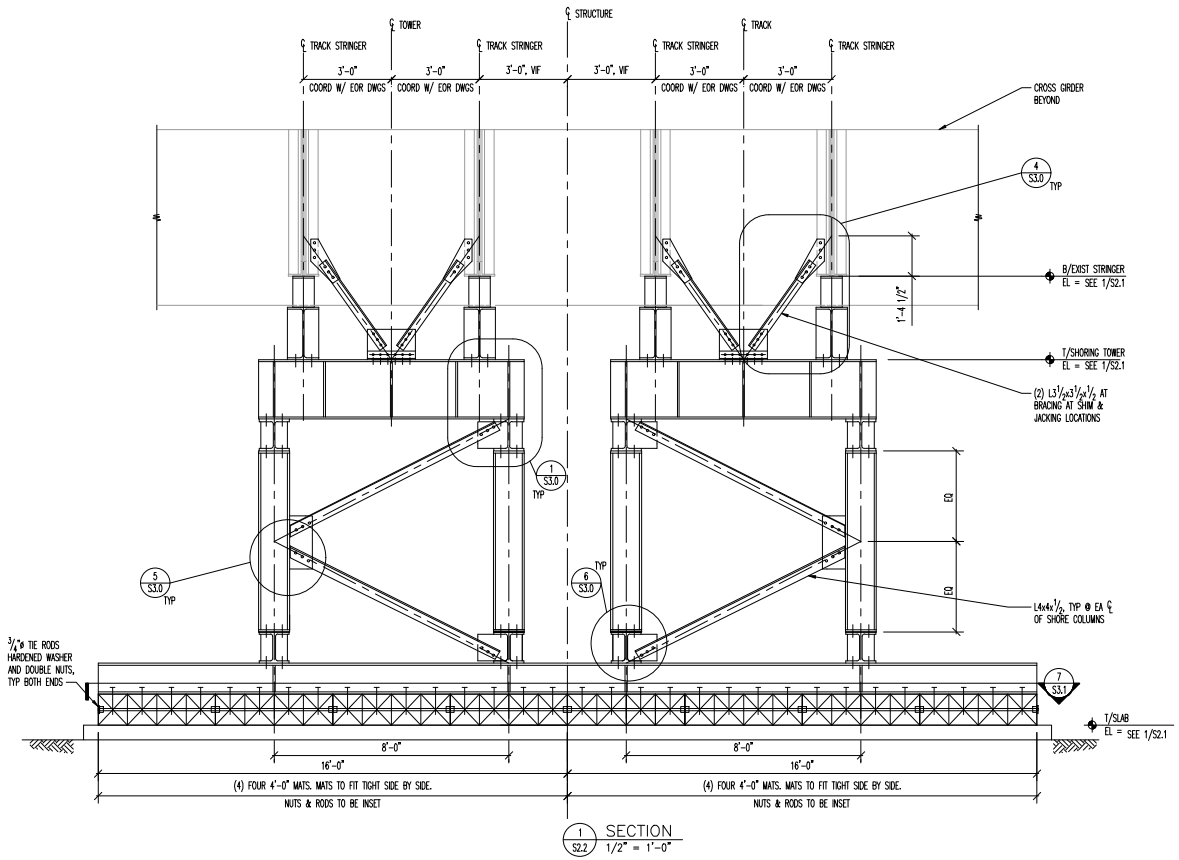
No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 2118D040.000
Drawn by: KRR
Checked by: RAF
Sheet Title:
PHASE 1
SHORING TOWER SECTIONS

S2.1

Structural Sheet: 4 of 7



1 S2.2 SECTION
1/2" = 1'-0"

1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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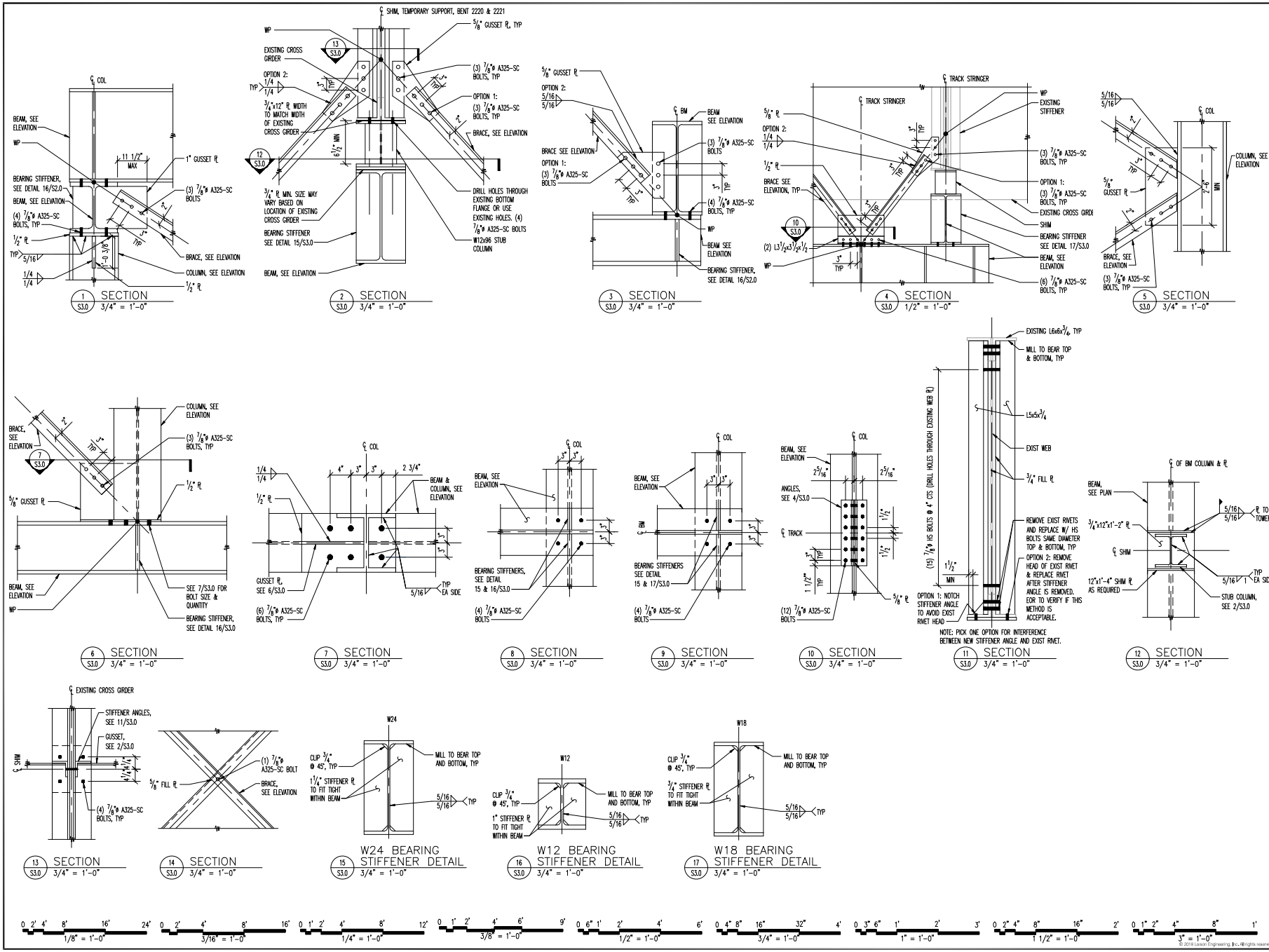
AMBER D. DELLANGELO
062-067998
Date: 05/03/2018 Expires: 11/30/2018
IL Design Firm #: 184-001442

No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 2118D240.000
Drawn by: KRR
Checked by: RAF
Sheet Title:
PHASE 1
SHORING TOWER SECTIONS

S2.2

Structural Sheet: 5 of 7



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Project Permit #: N/A

Larson Engineering, Inc.
1488 Bond Street, Suite 100
Naperville, IL 60563-6603
630.357.0540 Fax: 630.357.0164
www.larsonengr.com

CLIENT
METROPOLITAN STEEL INC.
1931 EAST 177TH ST
LANSING, IL 60438

TEMPORARY SHORING FOR CTA GREENLINE STATION
LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

SEAL
ANDREW D. DELLANGELO
062-040799
PROFESSIONAL STRUCTURAL ENGINEER
STATE OF ILLINOIS

Date: 05/03/2018
IL Design Firm #: 184-001442
Expires: 11/30/2018

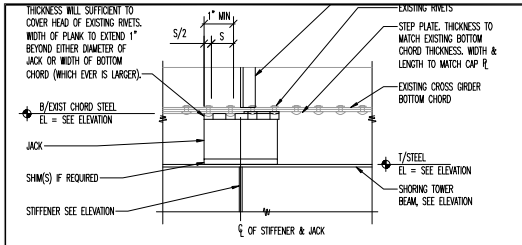
No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 2118D040.000
Drawn by: KRR
Checked by: RAF

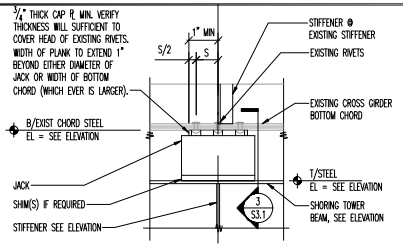
Sheet Title:
DETAILS

S3.0

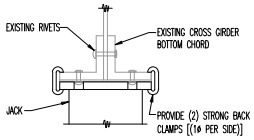
Structural Sheet: 6 of 7



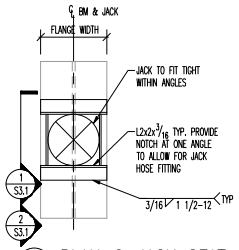
1 S3.1 TYP JACK DETAIL @ CROSS GIRDER STEP
1 1/2" = 1'-0"



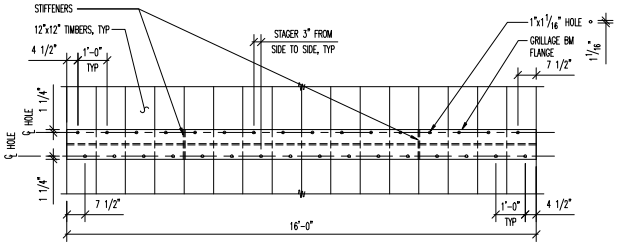
2 S3.1 TYP JACK DETAIL
1 1/2" = 1'-0"



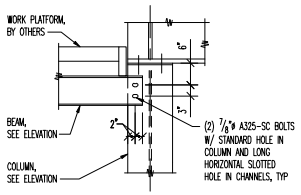
3 S3.1 CLAMP DETAIL @ JACK
1 1/2" = 1'-0"



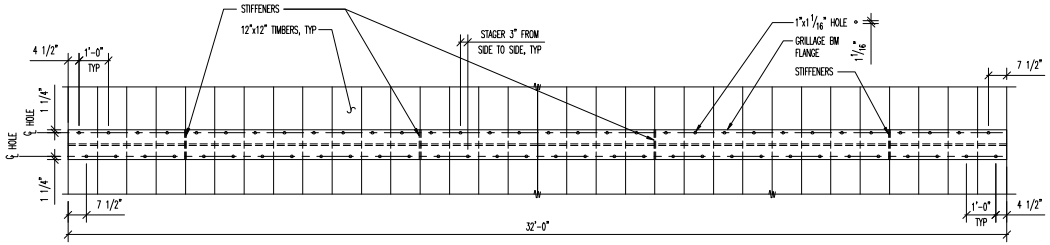
4 S3.1 PLAN @ JACK SEAT
1 1/2" = 1'-0"



5 S3.1 HOLE PATTERNS @ GRILLAGE BEAM
1/2" = 1'-0"



6 S3.1 SECTION
3/4" = 1'-0"



7 S3.1 HOLE PATTERNS @ GRILLAGE BEAM
1/2" = 1'-0"

1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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Project Permit #: N/A

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TEMPORARY SHORING FOR CTA GREENLINE STATION
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AMBER A. DELLANGELO
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STATE OF ILLINOIS

Date: 05/03/2018 Expires: 11/30/2018
IL Design Firm #: 184-001442

No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 2118D240.000
Drawn by: KRR
Checked by: RAF
Sheet Title:
DETAILS

S3.1

Structural Sheet: 7 of 7

Appendix B

From: Dan Melnyk <melnyk@capitolcementco.com>
Sent: Thursday, November 1, 2018 10:44 AM
To: Conan Chan; Thomas, Kenneth
Cc: Bridget Stalla; Julian Silva; Anne Zhang; Tim Caballero; Dave Budzius; Rajiv Pinto; Eric Anderson
Subject: RE: Lake Street Project Letter #32

Conan,

We ended up using a stone base which is slightly higher than the existing ground elevation. This is clear in my proposal and this base was actually prepared before I received the field order asking for a price. We discussed the stone base and I was under the impression that this was acceptable.

If you would like for me to pour another pad in another portion of the lot, I will need to revise my proposal. I believe that the current location and the way it is stacked is sufficient, please review. If sufficient, I can place 8' fence and tarp around the towers and ownership can be transferred. If not sufficient, please let me know and I will revise the proposal to include a mud slab. What thickness mud slab will be required? What portion of the lot and to what elevation would you like this mud slab poured (Space needed is approximately 15'x60')? Also, I will need to add to the proposal the relocation of the towers from their current location to the mud slab. If the mud slab is requested under the current stored location of the towers, we would need to move the towers twice and this would need to be included in my revised proposal.

As a side note, there are small parts and pieces of the shoring tower assembly which are currently at Metropolitan's yard. This includes the angle braces, the small top beams used for bent 2219 work, lag bolts to attach the shoring towers to the timbers as well as hardware. While I can store them within the enclosed 8' fence area, I do not recommend it as these parts can walk away. What I recommend is that these small pieces be stored at a secure City facility. If you provide this location, I can have these items delivered to you.

Please advise on how to proceed. A photo taken on 9/24 is attached for reference.

Thank you,
Dan Melnyk
Capitol Cement Company, Inc.
6231 N. Pulaski Road
Chicago, IL 60646
773-478-2200 (O)
773-478-4646 (F)
773-617-7826 (C)
melnyk@capitolcementco.com

Appendix C

Photo 1

Partially assembled steel frames of shoring towers stored directly on the ground (looking southwest).

Photo 2

Partially assembled steel frames of shoring towers stored directly on the ground (looking north).

Photo 3

Disassembled W24s stored on wood dunnage.

Photo 4

Disassembled bottom W12s stored on wood dunnage. 12x12 heavy timber cribbing panels stacked on dunnage above the W12s.

Photo 5

Minor surface rust on unpainted surfaces of angle brace connection.

Photo 6

12x12 heavy timber cribbing panels supported on dunnage above the ground (looking west).

CAPITOL CEMENT COMPANY, INC.
CONCRETE CONTRACTORS
ESTAB. 1914
6231 NORTH PULASKI ROAD, CHICAGO, ILLINOIS 60646
TELEPHONE (773) 478-2200
FAX (773) 478-4646

November 15, 2018 Letter #045

Daniel Burke, P.E., S.E.
Deputy Commissioner
Chicago Department of Transportation
Division of Engineering
30 North LaSalle Street, Suite 400
Chicago, IL 60602

Attn: Bridget Stalla, Project Manager

Re: Lake Street Reconstruction
Damen Ave to Ashland Avenue
C.D.O.T No.: B-4-118
Specification No.: 215456

Mrs. Stalla:

Please see the attached proposal for Owner purchase of MSI shoring towers and parts, according to FO #27.

Please note, per the attached proposal towers and materials will remain on-site.

The price for the proposed work is $139,739.81.

FYI, small pieces which could be carried away by hand will be stored at Capitol Cement's yard at no additional charge.

Please let us know if any of this price is acceptable.

Sincerely,
CAPITOL CEMENT COMPANY, INC.

Dan Melnyk
Vice President

Route: _____ County COOK PCM No. TBD

Force Acct Bill For: FO#27 – Owner Purchase of MSI Shoring Towers & Parts Project No. B-4-118

LABOR EXPENSES:

NAME	TRADE		Original Pad	Capitol to Install Fence Tarps	Temp Pad	Frame/Pour Mud Slab	Strip/Clean UP	TOTAL HOURS	RATE WAGE	AMOUNT INSURANCE	AMOUNT PAYROLL
Cement Masons:											
Cement Masons:	CM	ST				16.00	4.00	20	$46.25	$925.00	$925.00
		1.5T						0	$69.38		
		2T						0	$92.50		
						Cement Masons' Hours:		20		$925.00	$925.00
Laborers:											
Laborer 1	L	ST	4.00	8.00	4.00	24.00	4.00	44	$42.72	$1,879.68	$1,879.68
		1.5T						0	$64.08		
		2T						0	$85.44		
Emmanuel Sandoval	L	ST						0	$42.72	$0.00	$0.00
		1.5T						0	$64.08		
		2T						0	$85.44		
						Laborers' Hours:		44		$1,879.68	$1,879.68
Operator Engeeners:											
Operator Engineer 1	OE	ST	4.00		4.00			8	$49.30	$394.40	$394.40
		1.5T						0	$73.95		
		2T						0	$98.60		
Operator Engineer 2	OE	ST						0	$49.30	$0.00	$0.00
		1.5T						0	$73.95		
		2T						0	$98.60		
						Operator Engeeners' Hours:		8		$394.40	$394.40
Truck Drivers:											
Teamster 1	TD	ST	2.00		2.00			4	$41.43	$165.74	$165.74
		1.5T						0	$62.15		
		2T						0	$82.87		
						Truck Drivers' Hours:		4		$165.74	$165.74
						Total. Labor hours:		76			
									Total:	$3,364.82	$3,364.816
										Plus Markup 30	$1,009.445

Fringe Benefits:		*Totals:*								
Cement Masons	CM	16.00	0.00	0.00	0.00	16.00	@	$33.74	=	$539.84
Laborers	L	40.00	4.00	8.00	4.00	24.00	@	$28.51	=	$1,140.40
Operating Engineers	OE	8.00	4.00	0.00	4.00	0.00	@	$39.28	=	$314.24
Truck Drivers	TD	4.00	2.00	0.00	2.00	0.00	@	$18.88	=	$75.50
									Subtotal Fringes:	$2,069.980
									Plus Markup 10%:	$206.998

Plus Insurance & Taxes					
Workmen's Compensation Ins.	19.67%	of	$ 3,364.82	=	$661.86
Public Liability & Prop. Damage	3.00%	of	$ 3,199.08	=	$95.97
Federal Unemployment Tax	0.00%	of	$ 3,364.82	=	$0.00
State Unemployment Tax	0.000%	of	$ 3,364.82	=	$0.00
Federal Social Security Tax	7.65%	of	$ 3,364.82	=	$257.41
				Subtotal Insurance and Taxes:	$1,015.240
				Plus Markup 10%:	$101.524
				TOTAL LABOR:	$7,768.003

EQUIPMENT EXPENSES

Description		DATE & HOURS					*TOTAL HOURS*	*RATE*	*AMOUNT*
Skid Steer Loader:Bobcat S650 2011	BC-888	4.00		4.00	4.00	4.00	*16.00*	$38.48	*$615.68*
Excavators: Caterpillar 311B 1997	HE-04	4.00					*4.00*	$50.65	*$202.60*
Light Duty Truck: Ford - F250SD 2005	PU-2		4.00	4.00	4.00	4.00	*16.00*	$22.68	*$362.88*
Small Rear Dump: Ford F350 2005	SD-31	4.00	4.00	4.00	4.00	4.00	*20.00*	$43.03	*$860.60*
Flatbed Tag Trailers: Cronkhite 2005	T1	4.00		4.00	4.00	4.00	*16.00*	$3.53	*$56.48*
Semi Trailer: HILBILT 2001	T-42	2.00		2.00			*4.00*	$12.07	*$48.28*
Truck Tractor: Peterbilt - 378 2004	T-495	2.00		2.00			*4.00*	$59.98	*$239.92*
								TOTAL EQUIPMENT:	$2,386.440

MATERIALS:

Description	*UNIT*	DATE & QUANTITY	*TOTAL QTY*	*UNIT PRICE*	*AMOUNT*
Fence 12' Wide X 6' High	Each	16.00	*16.00*	99.40	*$1,590.40*
Temporary Fence Stand	Each	16.00	*16.00*	27.30	*$436.80*
Tarp 30' X 50'	Each	2.00	*2.00*	189.95	*$379.90*
Concrete (4"x75'x20')	CY	18.50	*18.50*	122.00	*$2,257.00*
				MATERIAL	$4,664.10
				PLUS MARKUP 15% (1st $10,000):	$699.62
				PLUS MARKUP 10% (Over $10,000):	$0.00
				TOTAL MATERIAL:	$5,363.715

SUBCONTRACTORS:

SUBCONTRACTORS: **Metropolitan Steel**

PARTICULARS: **FO#27 – Owner Purchase of MSI Shoring Towers & Parts**

PARTICULARS: **Owners Purchase Option #1**

Towers & Material Remain On-Site:

- On the Owner's lot a suitable temporary base shall be provided by others, not by MSI.

- Temporary lockable fence around stored material shall be provided by others, not by MSI.

- Secured tarp(s) over shoring tower and materials shall be provided by others, not by MSI.

- MSI will move tower components & materials to the City-Owner's lot. Using other's equipment, MSI will assist in repositioning the material onto other's suitable storage base.

- All four of the structural shoring towers will be provided based on final modifications required for the Stage 1 & Stage 2 shoring.

- MSI shall not be responsible for loss, theft, vandalism or any other damages upon transfer.

- MSI will allow others to purchase all of the items listed below.

SUB:

$110,000.00

	Subtotal:	**$110,000.00**
Plus Admin. Costs	5%	$500.00
(Over $10,000)	1%	$1,000.00

TOTAL, SUBCONTRACTORS: **$111,500.00**

SUBCONTRACTORS: **Metropolitan Steel**

PARTICULARS: **RELOCATION OF SHORING TOWERS**

PARTICULARS: **FO#27**

Towers & Material Remaining On-Site:

- In advance of MSI remobilizing , an area on the Owner's lot is to receive a compacted stone area adequate to temporarily place the shoring tower materials.

- With stone base in place, MSI will remobilize with hydraulic-crane and hoist the shoring material from its current location onto the new graded stone pad. The items will be placed on the stone pad for a "temporary-best-fit" condition and thus stacked to allow for ease of hoisting for the later relocation . After shoring material is relocated, MSI remove crane from site.

- After the towers are relocated, others will provide a temporary concrete pad with sufficient size to provide long-term storage for the temporary shoring.

- With temporary concrete pad in place and cured, MSI will remobilize the hydraulic-crane and hoist the shoring material from the above temporary location and place onto the new concrete

SUB:

$11,969.03

	Subtotal:	**$11,969.03**
Plus Admin. Costs	5%	
(Over $10,000)	1%	$119.69

TOTAL, SUBCONTRACTORS: **$12,088.72**

TOTAL METROPOLITAN STEEL: **$123,588.72**

Summary

Summary		
	Labor	**$7,768.00**
	Equipment	**$2,386.44**
	Materials	**$5,363.72**
	Subcontractors	**$123,588.72**
	Subtotal:	**$139,106.88**
Bond	0.4550%	**$632.94**
	Total:	**$139,739.81**

Approved: _____

Resident Engineer

METROPOLITAN STEEL INC.

AISC CERTIFIED ERECTOR

MBE/DBE Certified Company

Metropolitan Steel, Inc.
1931 E 177th Street
Lansing, IL 60438
Phone: (708) 474-2072
Fax: (708) 474-2073
www.metropolitan-steel.com

Change Order Quote #08 – Rev #1

Date: ~~October 3, 2018~~ November, 15, 2018

CDOT No.: **B-4-118**

MSI Job No.: **18-004**

TO: Capitol Cement Company, Inc.
6231 North Pulaski Road
Chicago, Illinois 60646

Bulletin No.: **n/a**

Field Order: **27**

Attention: Mr. Dan Melnyk

Job Name: **CDOT; CTA Lake Street Reconstruction, Damen to Ashland**

Regarding: **FO#27 – Owner Purchase of MSI Shoring Towers & Parts**

Based on the direction/instructions provided in Field Order #27, Metropolitan Steel agrees to sell its shoring towers, parts and materials used for the Lake Street Reconstruction project per the two pricing options described in FO#27 (Reference MSI COQ#09 for on-site relocations):

Owner Purchase Option #1: **Towers & Material Remain On-Site;**

- On the Owner's lot a suitable temporary base shall be provided by others, not by MSI.
- Temporary lockable fence around stored material shall be provided by others, not by MSI.
- Secured tarp(s) over shoring tower and materials shall be provided by others, not by MSI.
- MSI will move tower components & materials to the City-Owner's lot. Using other's equipment, MSI will assist in repositioning the material onto other's suitable storage base.
- All four of the structural shoring towers will be provided based on final modifications required for the Stage 1 & Stage 2 shoring.
- MSI shall not be responsible for loss, theft, vandalism or any other damages upon transfer.
- MSI will allow others to purchase all of the items listed below:

Total of Purchase Option #1: $ 110,000.00

Owner Purchase Option #2: Towers & Material Removed, Stored Off-Site & Returned;

- Remove towers & all related material from site. Store at Metropolitan's facility in Lansing, IL.
- Metropolitan will transport the towers and materials to the project site at Lake & Damen on Owner's requested delivery date, no later then October 1, 2019. Additional cost of $8,000 per month for each additional stored month will apply for prolonged storage.
- MSI will unload the shoring towers and material on site at one agreed location.
- The four towers will be provided in eight bent sections (full assembly by others, not by MSI).
- Foundations, pads, layout and final assembly of the shoring towers shall be by others.
- MSI will allow others to purchase all of the items listed below:

Total of Purchase Option #2: $ 198,890.00

List of all material Metropolitan Steel will sell as lump sum per the above price options:

Note: All material will be provide in "as-is" condition.

Four (4) towers; EACH tower consisting of the following items (multiply times 4 for total quantity):

(2) – W12x96 base beams 13'-1/4" long
(4) – W12x96 columns 6'-3-5/8" long
(4) – Angles 4"x4"x1/2" x 8'-7"+/- long that provide the 2 vertical "X" braces
(4) – Angles 4"x4"x1/2 x 8'-0" +/- long that provide the 2 vertical diagonal angle braces
(2) – W12x136 top beams 9'-0" +/- long
(3) – W24x131 jacking beams 9'-0" +/- long
(2) – W18x86 top jacking beams 9'-0" +/- long (Phase 1 only)
(2) – T-angle gusset assembly to attach to W24x131 (Phase 1 only)
(1) – lot of shop welded gusset plates, stiffener plates all shop attached
(4) – Angles 3-1/2"x3-1/2"x1/2" x 3'+/- long back-to-back angles with upper gusset plate (Phase 1). *Note; four (4) of the gusset plates were welded to the stiffener angles and others will need to replace if necessary at no additional cost to MSI.*
(6) – Angles 3-1/2"x3-1/2"x1/2" x 4'+/- long back-to-back angles with upper gusset plate (Phase 2).
(1) – Lot black A325 shop & field bolts *(assume all bolts pre-tensioned twice, others may need to replace, if necessary, at no additional cost to MSI).*

Grillage Beams: Shown on S2.0 thru S2.2 and detail 7/S3.1

(16) – W12x96 grillage beams, 16'-0" long. *Note: The grillage beams were originally fabricated as eight (8) 32' long beams for use Phase 1 shoring towers. After the Phase 1 work was complete the 32'-0" long beams were cut in half to allow for the (16) 16'-0" long W12x96 grillage beams for Phase 2.*

Hardwood Mats & Timber:

(16) – Nominal size 12" x 48" x 16'-0" standard hardwood timber mats
(4) - Nominal size 12" x 12" x 16'-0" standard hardwood timber
Note: Material may contain snapped lag bolts due to the inability in removing the lag bolts from the disassembly of Stage 2 shoring. (Others may need to replace at no additional cost to MSI.)

Lag Bolts:

(500+/-) Approximate quantity of the standard 7/8" diameter x 9" long Hex Head Lag Bolts.
Note: Some of the lag bolts may have rounded heads due to the challenges of removing the lag bolts from the disassembly of Stage 2 shoring. (Others may need to replace at no additional cost to MSI.)

Terms & Conditions:

1. This change order becomes part of and in conformance with the original contract / purchase order.
2. All other terms and conditions of the original contract / purchase order remain in effect.
3. This extra work to take place during straight time & OT hours in sequence with other contract work.
4. Testing, inspections, CTA flaggers and traffic control shall be by others (not by MSI).
5. All touch-up and finish painting by others (not by MSI).
6. The 100-Ton jacks, pumps and hoses were rented items and are EXCLUDED in the above purchase agreement.
7. All shim plates, stools and other secondary items are EXCLUDED in the above purchase agreement.
8. Based on all material provided in "as-is" condition (No additional replacement cost to MSI.)
9. MSI reserves and the right to adjust/modify the pricing based on scope or sequence changes.

Metropolitan Steel, Inc.

Dave Budzius
Project Manager

Attachment: Field Order #27, dated 09/20/18 (1-page)

cc. File

METROPOLITAN STEEL INC

AISC CERTIFIED ERECTOR

MBE/DBE Certified Company

Metropolitan Steel, Inc.
1931 E 177th Street
Lansing, IL 60438
Phone: (708) 474-2072
Fax: (708) 474-2073
www.metropolitan-steel.com

Change Order Quote #09

Date: November 14, 2018

CDOT No.: **B-4-118**

MSI Job No.: **18-004**

TO: Capitol Cement Company, Inc.
6231 North Pulaski Road
Chicago, Illinois 60646

Bulletin No.: **n/a**

Field Order: **27**

Attention: Mr. Dan Melnyk

Job Name: **CDOT; CTA Lake Street Reconstruction, Damen to Ashland**

Regarding: **FO#27 – Site Relocation of Shoring Material**

This Change Order Quote #09 is in addition to Metropolitan Steel's Change Order Quote #08 dated 10/03/18. Based on other's acceptance of Option #1 of COQ#08, Metropolitan Steel agrees to perform the following additional work for the site relocation of the subject shoring tower material:

Towers & Material Remaining On-Site;

- In advance of MSI remobilizing, an area on the Owner's lot is to receive a compacted stone area adequate to temporarily place the shoring tower materials.
- With stone base in place, MSI will remobilize with hydraulic-crane and hoist the shoring material from its current location onto the new graded stone pad. The items will be placed on the stone pad for a "temporary-best-fit" condition and thus stacked to allow for ease of hoisting for the later relocation. After shoring material is relocated, MSI remove crane from site.
- After the towers are relocated, others will provide a temporary concrete pad with sufficient size to provide long-term storage for the temporary shoring.
- With temporary concrete pad in place and cured, MSI will remobilize the hydraulic-crane and hoist the shoring material from the above temporary location and place onto the new concrete pad. After all shoring material is placed on the concrete pad, MSI will demobilize from the site.

Total of COQ#09: $11,969.03

Terms & Conditions:

1. This change order becomes part of and in conformance with the original contract / purchase order.
2. All other terms and conditions of the original contract / purchase order remain in effect.
3. This extra work to take place during straight time, no overtime work is included (operator 1/2 hr oil time only).
4. MSI reserves and the right to adjust/modify the pricing based on scope or sequence changes.

Metropolitan Steel, Inc.

Dave Budzius
Project Manager

cc. File

Metropolitan Steel, Inc.
1931 East 177th Street
Lansing, IL 60438
Phone: (708) 474-2072

Job Name: CDOT - CTA Lake Street Reconstruction — MSI No.: COQ-09

Subject: FO-27 (Add to COQ-08, Option #1); Site relocation of tower material — CDOT No.: B-4-118

Reference: MSI Quote COQ-09, dated 11/14/18 & Option #1 of COQ#08 — DATE: November 14, 2018

PERIOD n/a To n/a — CCCI RFI:

EQUIPMENT EXPENDITURE (HRS.)

MSI's EQUIPMENT LIST - (rates per Equipment Watch)	1 day	2 day	x	x	x	x	x	x	COST TOTAL HOURS	Equip Watch RATE	TOTAL
F450 Crew Truck with Tools,	**8.0**	**8.0**							**16.00**	$35.05	$560.80
Air Compressor									**0.00**	$18.96	$0.00
Rivet Buster									**0.00**	$2.14	$0.00
Magnetic Drill									**0.00**	$1.97	$0.00
									Total Owned Equipment =		**$560.80**

RENTAL EQUIPMENT		1 day	2 day	x	x	x	x	x	x			
45' Boom Manlift	*$1,199mo / 160hrs=$7.49/hr*									**0.00**	$7.49	$0.00
45' Boom Manlift	*$1,199mo / 160hrs=$7.49/hr*									**0.00**	$7.49	$0.00
										Total Rental Equipment =		**$0.00**

OWNED EQUIP EXPENSE	$560.80
RENTED EQUIP EXPENSE	0.00
PLUS 5%	$0.00 *applicable to rental equip*
TOTAL EQUIP EXPENSE	**$560.80**

PERMANENT MATERIAL EXPENSES - N/A

	Total	Price/Unit	Total Price
N/A	0.00		0.00

TOTAL MATERIAL EXPENSE $0.00

INCIDENTALS

	Total
Mag drills, drill bits and services	$ -

SUBTOTAL INCIDENTAL EXPENSE	$0.00
PLUS 5%	$0.00
TOTAL INCIDENTAL	$0.00

		1 day	2 day	x	x	x	x	x	x	COST TOTAL HOURS	RATE	TOTAL
SUBCONTRACTORS												
Central; 40-ton Crane		**8.0**	**8.0**							**16.0**	$88.50	$1,416.00
Central; Operator ST	*ST Rate $144.00 hr*	**8.0**	**8.0**							**16.0**	$144.00	$2,304.00
Central; Operator DT	*OT Rate $237.00 hr*	**0.5**	**0.5**							**1.0**	$237.00	$237.00
											Subcontractor Total =	**$3,957.00**

SUBTOTAL	$3,957.00
PLUS 10% of 1st $10K	$395.70
Plus 5% above $ 10K	$0.00
TOTAL SUBCONTRACTOR	**$4,352.70**

COST SUMMARY

TOTAL LABOR	$7,055.60
TOTAL EQUIPMENT	$560.80
TOTAL MATERIAL	$0.00
TOTAL INCIDENTALS	$0.00
TOTAL SUBCONTRACTOR	$4,352.70
SUBTOTAL	**$11,969.10**

MSI's Extra No: COQ-09

Cost Impact: $ 11,969.03

Reference MSI Letter COQ#09, dated 11/14/18

Metropolitan Steel, Inc.
1931 E 177th Street
LANSING, IL 60438
Phone: (708) 474-2072

DATE 11/14/18

Job Name: CDOT - CTA Lake Street Reconstruction

MSI Number: COQ-09
FHP Number: B-4-118
RFI No.: 0

Subject: FO-27 (Add to COQ-08, Option #1); Site relocation of tower material
Reference: MSI Quote COQ-09, dated 11/14/18 & Option #1 of COQ#08

JOURNEYMAN IRONWOORKERS PENSION & WELFARE HRS @ $39.10 *(Based on June 1st 2018-to-2019 Rates)*

T&M Sheet:		1		2		x		x		x		x													
Date:		1st Day		2nd Day		x		x		x		x		TOTAL	TOTAL			TOT		TOT				TOTAL WAGES	PAYROLL AMOUNT ELIGIBLE FOR
NAME	FRING ERATE	1st Day		2nd Day		x		x		x		x		ST	OT	TOTAL	PAY	STRT	FRINGE	FRINGE	PREMIUM	PREMIUM		ENDING PRIOR	
		ST	OT	ST	OT	ST	OT	ST	OT	ST	OT	ST	OT	HRS	HRS	HRS	RATE	PAY	RATE	AMOUNT	RATE	AMOUNT		WEEK	F.U.T.	S.U.T.
														0	0	0	$63.70	$0.00	$0.00	$0.00	$ 63.70	$0.00		$0.00	$0.00	$0.00
														0	0	0	$48.20	$0.00	$0.00	$0.00	$ 48.20	$0.00		$0.00	$0.00	$0.00
E. Kochan - IWF	$39.10	8		8										16	0	16	$52.83	$845.28	$39.10	$625.60	$ 52.83	$0.00		$0.00	$0.00	$0.00
Bill Stone - IWJ	$39.10	8		8										16	0	16	$48.83	$781.28	$39.10	$625.60	$ 48.83	$0.00		$0.00	$0.00	$0.00
Robert Weaver - IWJ	$39.10	8		8										16	0	16	$48.83	$781.28	$39.10	$625.60	$ 48.83	$0.00		$0.00	$0.00	$0.00
	$39.10													0	0	0	$48.83	$0.00	$39.10	$0.00	$ 48.83	$0.00		$0.00	$0.00	$0.00
	$39.10													0	0	0	$48.83	$0.00	$39.10	$0.00	$ 48.83	$0.00		$0.00	$0.00	$0.00
	$39.10													0	0	0	$48.83	$0.00	$39.10	$0.00	$ 48.83	$0.00		$0.00	$0.00	$0.00
	$39.10													0	0	0	$48.83	$0.00	$39.10	$0.00	$ 48.83	$0.00		$0.00	$0.00	$0.00
	$39.10													0	0	0	$48.83	$0.00	$39.10	$0.00	$ 48.83	$0.00		$0.00	$0.00	$0.00
	$39.10													0	0	0	$48.83	$0.00	$39.10	$0.00	$ 48.83	$0.00		$0.00	$0.00	$0.00
	$39.10													0	0	0	$48.83	$0.00	$39.10	$0.00	$ 48.83	$0.00		$0.00	$0.00	$0.00
	$39.10													0	0	0	$48.83	$0.00	$39.10	$0.00	$ 48.83	$0.00		$0.00	$0.00	$0.00
	$39.10													0	0	0	$48.83	$0.00	$39.10	$0.00	$ 48.83	$0.00		$0.00	$0.00	$0.00
SUB TOTAL =		24	0	24	0	0	0	0	0	0	0	0	0	48	0			$2,407.84		$1,876.80					$0.00	
																	TOT PREM	$0.00				TOT PREM:		$0.00		$0.00
																	TOT PAYROL	$2,407.84								
																TOTAL HOURS ST & OT:	48			TOTAL FRINGES	$1,876.80				

MSI JOB No.: **18-004**

CONTRACTOR: **Metropolitan Steel, Inc.**
1931 E 177th Street
Lansing IL 60438

			TOTAL PAYROLL & FRINGES	$4,284.64
	MARK-UP OF FRINGES	10%	$1,876.80	$187.68
	MARK-UP OF LABOR	30%	$2,407.84	$722.35
				$5,194.67

$5,194.67

WORKERS COMP INSURANCE:	57.10%	OF TOT STRT PAY	$2,407.84	$	1,374.88
LIABILITY INSURANCE	5.51%	OF TOT STRT PAY	$2,407.84	$	132.67
FEDERAL UNEMPLOYMENT TAX	0.80%	OF ELIGIBLE F.U.T.	$0.00	$	-
STATE UNEMPLOYMENT TAX	9.45%	OF ELIGIBLE S.U.T.	$0.00	$	-
FICA	6.20%	OF TOT PAYROLL	$2,407.84	$	149.29
MEDICARE	1.45%	OF TOT PAYROLL	$2,407.84	$	34.91
		SUB-TOTAL INS AND TAXES		$	1,691.75
		MARK-UP OF 10%	$1,691.75	$	169.17
		SUB-TOTAL:		$	1,860.92

$ 1,860.92

Reference: MSI Quote COQ-09, dated 11/14/18 & Option #1 of COQ#08

TOTAL LABOR : $ 7,055.60

CENTRAL
Contractors Service, Inc.

Members of the ALL Family of Companies

CRESTWOOD
PO Box 520 • Midlothian, IL 60445-0520
P. 708-239-7940 • F. 708-385-6035

ALSIP
4640 W. 120th St. • Alsip, IL 60803-2317
P. 708-385-1827 • F. 708-385-4387

Invoice 3660941

Invoice Date: Friday, August 31, 2018
Customer: 183026
Job No: ALC-3739459
Job Site: DIGITAL
9330 W GRAND
FRANKLIN PARK, IL
Sales Person: Paul Urbanski
Terms: NET 10

Metropolitan Steel, Inc.
1931 E. 177th St.
Lansing, IL 60438

Work Performed: Rental of one 40 Ton Assist Crane to dismantle Manitowoc 888

Date	Description	Unit No	Qty	Unit Meas	Rate	Extension
8/30/2018	40 Ton Truck Crane 6 am - 530 pm	9691	11.50	Hours	$66.00	$759.00
	Operator Labor S.T.		8.00	Hours	$144.00	$1,152.00
	Operator Labor Double Time		3.50	Hours	$237.00	$829.50
	Fuel Surcharge-Crane		0.04	Percent	$759.00	$30.36
	Permit Fee		1.00	Each	$150.00	$150.00

Total Invoice : $2,920.86

Please remit payment to the Crestwood branch

HOURLY RATES

FUEL = $30.36
PERMIT = $150.00
$180.36
÷ 8 HRS
$22.55
+ $66.00 (BARE)
40-TON $88.55/HR
OPER ST. $144.00/HR
OPER DT $237.00/HR

Any billing dispute must be resolved within thirty (30) days of the above invoice date. Late payments shall accrue interest at the rate of 1 ½% per month (18% per annum), or the maximum rate permitted by law, if less.

EquipmentWatch

www.equipmentwatch.com

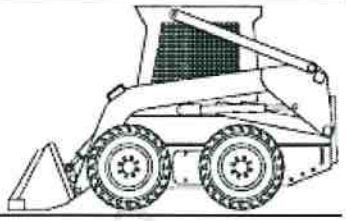
All prices shown in US$

Adjustments for BC-888 in All Saved Models

November 15, 2018

Bobcat S650
Skid Steer Loaders

Size Class:
2501 - 2900 lbs
Weight:
8,327 lbs.



Configuration for S650

Power Mode	**Diesel**	Net Horsepower	**74.3 hp**
Operator Protection	**ROPS**	Operating Capacity (SAE)	**2690 lbs**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$3,480.00	$975.00	$245.00	$37.00	$18.85	$38.62
Adjustments						
Region (Chicago, Illinois: 103%)	$104.40	$29.25	$7.35	$1.11		
Model Year (2011: 96.4%)	($129.04)	($36.15)	($9.08)	($1.37)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	**$3,455.36**	**$968.10**	**$243.27**	**$36.74**	**$18.85**	**$38.48**

Non-Active Use Rates	**Hourly**
Standby Rate	$6.68
Idling Rate	$27.90

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	22%	$765.60/mo
Overhaul (ownership)	66%	$2,296.80/mo
CFC (ownership)	4%	$139.20/mo
Indirect (ownership)	8%	$278.40/mo
Fuel (operating) @ 3.01	44%	$8.27/hr

Revised Date: 2nd Half 2018

These are the most accurate rates for the selected Revision Date(s). However, due to more frequent online updates, these rates may not match Rental Rate Blue Book Print. Visit the Cost Recovery Product Guide on our Help page for more information.

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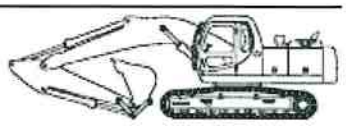
All prices shown in US$

Adjustments for HE-04 in All Saved Models

November 15, 2018

Caterpillar 311B (disc. 2001)
Crawler Mounted Hydraulic Excavators



Size Class:
10.1 - 12.0 MTons
Weight:
25,005 lbs.

Configuration for 311B (disc. 2001)

Net Horsepower	**79 hp**	Power Mode	**Diesel**
Bucket Capacity - Heaped	**.75 cu yd**	Operating Weight	**11.3 mt**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$4,255.00	$1,190.00	$300.00	$45.00	$25.75	$49.93
Adjustments						
Region (Chicago, Illinois: 103%)	$127.65	$35.70	$9.00	$1.35		
Model Year (2001: 100%)	-	-	-	-		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	**$4,382.65**	**$1,225.70**	**$309.00**	**$46.35**	**$25.75**	**$50.65**

Non-Active Use Rates

	Hourly
Standby Rate	$12.70
Idling Rate	$33.46

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	37%	$1,574.35/mo
Overhaul (ownership)	49%	$2,084.95/mo
CFC (ownership)	7%	$297.85/mo
Indirect (ownership)	7%	$297.85/mo
Fuel (operating) @ 3.01	33%	$8.56/hr

Revised Date: 2nd Half 2018

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All prices shown in US$

Adjustments for PU-02 in All Saved Models

November 15, 2018

Ford F-250 SD
On-Highway Light Duty Trucks

Size Class:
300 HP & Over
Weight:
N/A

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	Weekly	Daily	Hourly	Hourly	Hourly
Published Rates	$820.00	$230.00	$58.00	$9.00	$18.35	$23.01
Adjustments						
Region (Chicago, Illinois: 103.2%)	$26.24	$7.36	$1.86	$0.29		
Model Year (2005: 90.1%)	($83.78)	($23.50)	($5.93)	($0.92)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	**$762.46**	**$213.86**	**$53.93**	**$8.37**	**$18.35**	**$22.68**

Non-Active Use Rates

	Hourly
Standby Rate	$3.12
Idling Rate	$18.92

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	57%	$467.40/mo
Overhaul (ownership)	28%	$229.60/mo
CFC (ownership)	5%	$41.00/mo
Indirect (ownership)	10%	$82.00/mo
Fuel (operating) @ 2.56	80%	$14.59/hr

Revised Date: 2nd Half 2018

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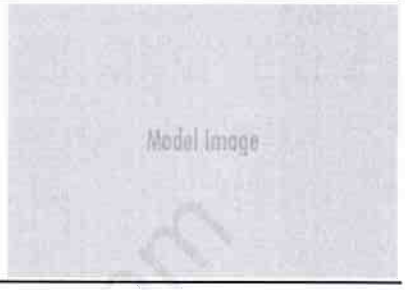
All prices shown in US$

Adjustments for SD-31 in All Saved Models

November 15, 2018

Miscellaneous 4X2 4YD GAS
On-Highway Rear Dumps

Size Class:
19,501 - 26,000 GVW
Weight:
7,464 lbs.



Configuration for 4X2 4YD GAS

Struck Capacity	**2 cu yd - 4 cu yd**	Axle Configuration	**4X2**
Power Mode	**Gasoline**	Horsepower	**275**
Maximum Gross Vehicle Weight	**20000 lbs**		

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$1,680.00	$470.00	$120.00	$18.00	$34.75	$44.30
Adjustments						
Region (Chicago, Illinois: 103.2%)	$53.76	$15.04	$3.84	$0.58		
Model Year (2005: 84.1%)	($275.67)	($77.12)	($19.69)	($2.95)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	**$1,458.09**	**$407.92**	**$104.15**	**$15.63**	**$34.75**	**$43.03**

Non-Active Use Rates

	Hourly
Standby Rate	$5.63
Idling Rate	$35.03

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	51%	$856.80/mo
Overhaul (ownership)	32%	$537.60/mo
CFC (ownership)	6%	$100.80/mo
Indirect (ownership)	11%	$184.80/mo
Fuel (operating) @ 2.56	77%	$26.75/hr

Revised Date: 2nd Half 2018

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All prices shown in US$

Adjustments for T1 in All Saved Models

November 15, 2018

Miscellaneous GOOSE 2 1 6
Non-Tilt Deck Utility Trailers

Size Class:
All
Weight:
7,000 lbs.

Configuration for GOOSE 2 1 6

Number of Tires	**4**	Number of Axles	**2**
Hitch Type	**Gooseneck/5th Wheel**	Capacity	**6 t**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$310.00	$87.00	$22.00	$3.00	$1.95	$3.71
Adjustments						
Region (Illinois: 102.2%)	$6.82	$1.91	$0.48	$0.07		
Model Year (2005: 88%)	($38.02)	($10.67)	($2.70)	($0.37)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	**$278.80**	**$78.24**	**$19.78**	**$2.70**	**$1.95**	**$3.53**

Non-Active Use Rates

	Hourly
Standby Rate	$1.00
Idling Rate	$1.58

Rate Element Allocation

Element	**Percentage**	**Value**
Depreciation (ownership)	44%	$136.40/mo
Overhaul (ownership)	37%	$114.70/mo
CFC (ownership)	6%	$18.60/mo
Indirect (ownership)	13%	$40.30/mo

Fuel cost data is not available for these rates.

Revised Date: 2nd Half 2018

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EquipmentWatch

www.equipmentwatch.com

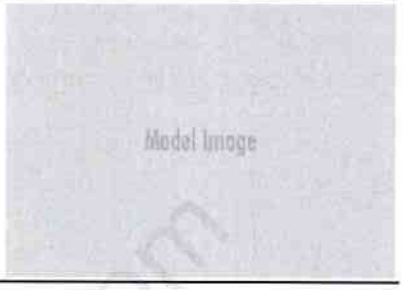
All prices shown in US$

Adjustments for T-42 in All Saved Models

November 15, 2018

Miscellaneous STANDARD 24 21
On-Highway Rear Dump Semi Trailers

Size Class:
All
Weight:
11,700 lbs.



Configuration for STANDARD 24 21

Payload	**24 t**	Capacity	**21 cu yd**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$1,285.00	$360.00	$90.00	$14.00	$5.40	$12.70
Adjustments						
Region (Illinois DOT: 102.2%)	$28.27	$7.92	$1.98	$0.31		
Model Year (2001: 89.4%)	($139.21)	($39.00)	($9.75)	($1.52)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	**$1,174.06**	**$328.92**	**$82.23**	**$12.79**	**$5.40**	**$12.07**

Non-Active Use Rates

	Hourly
Standby Rate	$3.34
Idling Rate	$6.67

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	36%	$462.60/mo
Overhaul (ownership)	51%	$655.35/mo
CFC (ownership)	4%	$51.40/mo
Indirect (ownership)	9%	$115.65/mo

Fuel cost data is not available for these rates.

Revised Date: 2nd Half 2018

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EquipmentWatch

www.equipmentwatch.com

All prices shown in US$

Adjustments for T-495 in All Saved Models

November 15, 2018

Miscellaneous 6X4 45KGVW DSL
On-Highway Truck Tractors

Size Class:
33,001 - 45,000 GVW
Weight:
13,496 lbs.

Configuration for 6X4 45KGVW DSL

Axle Configuration	**6X4**	Power Mode	**Diesel**
Horsepower	**380**	Maximum Gross Vehicle Weight	**45000 lbs**

Blue Book Rates

** FHWA Rate is equal to the monthly ownership cost divided by 176 plus the hourly estimated operating cost.

	Ownership Costs				Estimated Operating Costs	FHWA Rate**
	Monthly	**Weekly**	**Daily**	**Hourly**	**Hourly**	**Hourly**
Published Rates	$3,505.00	$980.00	$245.00	$37.00	$41.95	$61.86
Adjustments						
Region (Illinois: 101.6%)	$56.08	$15.68	$3.92	$0.59		
Model Year (2004: 89.1%)	($388.16)	($108.53)	($27.13)	($4.10)		
Adjusted Hourly Ownership Cost (100%)	-	-	-	-		
Hourly Operating Cost (100%)					-	
Total:	**$3,172.92**	**$887.15**	**$221.79**	**$33.49**	**$41.95**	**$59.98**

Non-Active Use Rates

	Hourly
Standby Rate	$10.10
Idling Rate	$46.05

Rate Element Allocation

Element	Percentage	Value
Depreciation (ownership)	42%	$1,472.10/mo
Overhaul (ownership)	44%	$1,542.20/mo
CFC (ownership)	5%	$175.25/mo
Indirect (ownership)	9%	$315.45/mo
Fuel (operating) @ 3.01	67%	$28.02/hr

Revised Date: 2nd Half 2018

These are the most accurate rates for the selected Revision Date(s). However, due to more frequent online updates, these rates may not match Rental Rate Blue Book Print. Visit the Cost Recovery Product Guide on our Help page for more information.

The equipment represented in this report has been exclusively prepared for MIKE FARSHCHI (mike@capitolcementco.com)

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Midwest Fence Corporation

900 N. Kedzie Ave
Chicago, IL 60651-4187
Phone: (773) 722-6616 Fax: (773) 722-6626

INVOICE # S31687

DATE: 5/25/2018
TERMS: Net 10
CUST PO #:
CUSTOMER ID: 335
MIDWEST JOB #: 83979

BILL TO:

Capitol Cement Company, Inc.
6231 North Pulaski Rd
Chicago IL 60646

Phone: 773-283-3900 Fax: 773-478-5599

JOB ADDRESS:

Picked Up 04/27/18

Ordered by Dan Melnyk

QUANTITY	U/M	DESCRIPTION	UNIT PRICE	TOTAL
60.00	EA	Temporary Fence Panel 12' Wide x 6' High	99.40	5,964.00
60.00	EA	Temporary Fence Stand	27.30	1,638.00
60.00	EA	Temporary Fence Clamp	3.00	180.00
			TOTAL:	**8,579.66**

SIMILAR PRODUCTS

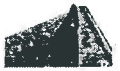
10' x 12' Super Heavy Duty 8 oz. Tarp

Item #: T9FB335748

$17.00

12' x 16' Super Heavy Duty 8 oz. Tarp

Item #: T9F269852



$28.95

Global™ 10' x 20' Super Heavy Duty 8 oz.

Item #: T9F298578

$26.95

8' x 10' Super Heavy Duty 8 oz. Tarp Brown

Item #: T9FB335837

MORE

Rollover image to zoom in

See all 46 items in product family

Global™ 30' x 50' Super Heavy Duty 8 oz. Tarp Brown

Item #: T9F298592

Email | Print

Ships same day.

1 reviews | Write a review

Price: $ 189.95

Quantity: 1

ADD TO CART

Add to list

LIVE CHAT

Customers Who Viewed This Also Viewed

Global™ 30' x 40' Super Heavy Duty 8 oz. Tarp Brown

Global™ 40' x 60' Super Heavy Duty 8 oz. Tarp Brown

Global™ 30' x 30' Super Heavy Duty 8 oz. Tarp Brown

Frequently Purchased Together

6" Premium Black Ball Bungie - Package of 50

Add $15.00

4" Premium Black Ball Bungie - Package of 50

Add $14.00

8" Premium Black Ball Bungie - Package of 50

Add $16.00

Product Information | Photo/Video Gallery | Customer Review | Product Q&A | Accessories

Global™ 30' x 50' Super Heavy Duty 8 oz. Tarp Brown This Woven Poly Tarp is Waterproof, Mildew proof, Tear Resistant and Acid Resistant. 8 oz. per square yard, 16x16 weave count, grommets approximately every 18", reinforced corner grommet. Finished size approximately 2% shorter. Tarp is lightweight yet durable, manufactured from high-density polyethylene and woven into fabric and then laminated on both sides then finished by hemming the edges with poly twine inserted in hem. All seams and hems are heat sealed. UV Treated

Product Specifications

LENGTH FEET	50
WIDTH FEET	30
COLOR FINISH	Brown
BRAND	Global™
CONSTRUCTION	Polyethylene
DESCRIPTION	Heavy Duty Tarp
MANUFACTURERS PART NUMBER	122PA3050

INVOICE

OZINGA READY MIX CONCRETE, INC.
P.O. BOX 910
FRANKFORT, IL 60423
P: 708-326-4200 F:708-326-4201

CUSTOMER NO.	DATE	INVOICE NO.
00016616	12/01/2016	831893
P.O. NO.	TERMS	
	NET 30	
	Page 1 of 1	

JOB NO.	LOT(S)
000190	

SOLD TO:
667 3 MB 0.669 E0116 I0904 D2060668292 S2 P3725080 0003:0011

CAPITOL CEMENT COMPANY, INC.
6231 N PULASKI RD
CHICAGO IL 60646-5182

RECEIVED
DEC 12 2016

SHIPPED TO:
CDOT B-6-141, 19TH & WENTWORTH
CHICAGO, IL

DATE	PLANT	TICKET NO.	QUANTITY	UOM	DESCRIPTION	PRICE	EXTENSION
12/01/16	110	91873	9.00	CY	71-PCC-709Z 6.1 BG WR FULL AE	113.00	1017.00
12/01/16	110	91873	9.00	CY	WINTER SERVICE	7.50	67.50
12/01/16	110	91873	9.00	CY	ENVIRONMENTAL CHARGE	1.50	13.50
12/01/16	110	91873	9.00	CY	1.00% NON-CHLORIDE ACCELERATOR	7.00	63.00
12/01/16	110	91898	3.00	CY	71-PCC-709Z 6.1 BG WR FULL AE	113.00	339.00
12/01/16	110	91898	3.00	CY	WINTER SERVICE	7.50	22.50
12/01/16	110	91898	3.00	CY	ENVIRONMENTAL CHARGE	1.50	4.50
12/01/16	110	91898	3.00	CY	1.00% NON-CHLORIDE ACCELERATOR	7.00	21.00

PRODUCT RECAP

				PRICE	EXTENSION	TAX	TOTAL
709Z	71-PCC-709Z 6.1 BG WR FULL AE	12.00	CY	113.00	1356.00	0.00	1356.00
WS	WINTER SERVICE	12.00	CY	7.50	90.00	0.00	90.00
EC	ENVIRONMENTAL CHARGE	12.00	CY	1.50	18.00	0.00	18.00
NCAO	1.00% NON-CHLORIDE ACCELERATOR	12.00	CY	7.00	84.00	0.00	84.00

122

Transaction: 8214
Vendor: 300
G/L: 4500
Job: 65171
Cost Code: PCC
Cost Class: M

TOTAL CYDS: 12.00
TOTAL TONS: 0.00

TAXABLE AMOUNT	0.00
EXEMPT AMOUNT	1,548.00
SALES TAX	0.00
INVOICE TOTAL	1,548.00

Paying by ACH is safe, quick and easy. Just use the following information to submit your payment today! Account # 5590045356 Routing #071000039

A FINANCE CHARGE OF 1.5% PER MONTH (18% PER ANNUM) CHARGED ON ALL PAST DUE ACCOUNTS.
PLEASE COMPLETE THE LAST PAGE FOR ANY TAX ADJUSTMENTS AND SEND IN WITH PAYMENT. THANK YOU.

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
SUBMITTAL TRANSMITTAL

SUBMITTAL NO. 071-01-~~01~~ 02
CTA SBMTL #21
SBMTD 7-11-18

Project Name:	Lake Street Reconstruction Project: Damen to Ashland	Submitted By:	Capitol Cement Company, Inc.
Project No.:	B-4-118		6231 North Pulaski, Chicago, IL 60646
Contractor:	Capitol Cement Company, Inc.		☒ Gen ☐ Sub ☐ Supplier
Date:	June 15, 2018	Contact Name:	Dan Melnyk
		Contact Phone:	773-478-2200

Pay Item Number	Submittal Number	Quantity	Description (Use Additional Sheets as Required)	Action
	071-01-01		Shoring Tower Details and Structural Calculations for Supporting CTA Structure	N/E
			(Please also reference submittal 38-01-00 which provides details for the stiffeners)	

NO EXCEPTIONS
After review for conformance with general design concept only.
Contractor may proceed with work but remains responsible for meeting specified performance and conditions of the Contract.
BY: T. Thomas DATE: 7/25/18
FOR
CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING
CDOT NO. B-4-118
Knight E/A, Inc.
221 N. LaSalle St. - Suite 300
Chicago, IL 60601

Action Key:

N/E: No Exceptions, submittal is approved. Proceed with fabrication/construction.

E/N: Exceptions Noted, submittal is approved as noted. Proceed with fabrication/construction. Please re-submit _ corrected copies.

R: Revise & Resubmit, submittal is rejected and returned for corrections as noted. Please review and resubmit.

N/A: No Action, submittal has not been reviewed.

Transmittal Dates:

Date submitted by Contractor:	06/15/2018	Date transmitted to Contractor:	7/25/18
Date transmitted to City Of Chicago		Date returned from :	
Date transmitted to D o R :	6/20/18	Date returned from D o R :	7/11/18
Date transmitted to CTA :	7/11/18	Date returned from CTA :	7/23/18

Distribution:

Transmittal Sheet:

Reviewed Submittal:

RE

Recent Pages...

Project Menu

- **Details**
- **Forms**
- **Processes**
- **Documents**
- **Schedule**
- **Calendar**
- **Submittals**
  - Submittal Register
  - Submittal Packages
  - Update Dates
  - Settings

Submittal Item Details

Note
The item is pending review or has been approved by the coordinator or has been closed. It cannot be edited at this time.

Submittal Item Overview **Date Details** **History**

Send to Sub | Close

Project	CDOT - Lake Line - Damen to Ashland Streetscape - Damen Column Relocation		
Title	Submittal No 071-01-01 CTA Str Shoring Towers Dwgs & Calcs	Status	REC - Received for Record
Number	26	Item Status	Open
Description	Submittal No 071-01-01 CTA Str Shoring Towers Dwgs & Calcs		
Package #	21-0	Priority	Normal
Spec Section	05 10 30 - Structural Steel	Revision	0
Category	Shop Drawing	Sub Section	
Responsible Sub/Manufacturer	Metropolitan Steel	Commitment	
Item Held By	Ken Thomas		

Documents (2) **Comments (4)** **Custom Fields (0)** **Revisions (0)**

Add Comment

Michael (Adj Const) McCarthy, *Chicago Transit Partners*, 07.23.2018 07:38 AM

Rec'd for Record

Joel Villanueva, *Chicago Transit Authority*, 07.20.2018 03:56 PM

This submittal is received for record with no comments.

Joel Villanueva, *Chicago Transit Authority*, 07.20.2018 03:55 PM

This submittal is received for record with no comments.

The attached submittal was transmitted via email by Bridget Stella on 7-20-18. Previously submitted package was not legible.

Files Attached (1):
071-01-01 Shoring Tower Details and Structural Analysis By Metropolitan (2).pdf (Version 1)
Properties | Download | Redline

Ken Thomas, *Knight/EA*, 07.11.2018 08:27 AM

Please see the attached Submittal No 071-01-01 CTA Structure Shoring Towers, Drawings & Calcs for the CTA's review & comment.

Kind regards,

K. Thomas

Add Comment

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METROPOLITAN STEEL INC.

AISC CERTIFIED ERECTOR

MBE/DBE Certified Company

Metropolitan Steel, Inc.
1931 East 177th Street
Lansing, IL 60438
Phone: (708) 474-2072
Fax: (708) 474-2073
www.metropolitan-steel.com

Letter of Transmittal

To:	**Dan Melnyk** (email: Melnyk@capitolcementco.com)	Date:	**June 15, 2018**
Company:	**Capitol Cement Company, Inc.**	Phone:	**773-478-2200**
Address:	**6231 North Pulaski Road**	Fax:	**773-478-4646**
	Chicago, Illinois, 60646	From:	***Dave Budzius***
Reference:	**CTA Lake Street Reconstruction** **Damen to Ashland; Project No: B-4-118**	MSI No.:	**TR-409**

We are sending you: ☐ Shop drawings ☐ Prints ☐ Plans ☐ Other;

Sent Via: ☐ Mail ☐ Hand Delivery ☐ Fed-X ☐ UPS ☒ Email (Dan Melnyk; Melnyk@capitolcementco.com)

Transmitted as checked below:

☒ For approval ☐ Approved as noted ☒ Resubmit ☒ For your use

☐ For pricing ☒ As requested ☐ For your review and comment

MSI's: Phase 1 & Phase 2 Temporary Shoring Calculations & Drawings

See the attached pdf files containing at total of 35-pages:

- **"Structural Calculations – Shoring Tower Analysis", by Larson Engineering, Inc, signed and stamped by Amber Dellangelo, S.E., dated 06/15/18 (26-pages)**
- **"Temporary Shoring Drawings; S1.0, S1.1, S2.0, S2.1, S2.2, S3.0 and S3.1", by Larson Engineering, Inc, signed and stamped by Amber Dellangelo, S.E., dated 05/03/18 (7-pages), [*same drawings as submitted in MSI transmittal #TR-406*]**

Note: This transmittal and above engineering data is in response to the attached emailed comments (2-pages) and is based on the data provided in "Calculation 13 – Shoring Tower Design" dated 06/20/17, provided to MSI on 06/11/18.

Cc: Tim Caballero, (tim@metropolitan-steel.com) emailed
Kevin Parker, (kevin@metropolitan-steel.com) emailed
File

Larson Engineering, Inc.
1488 Bond Street, Suite 100
Naperville, IL 60563-6503
630.357.0540 Fax: 630.357.0164
www.larsonengr.com

Larson

Lake St. Temporary Shoring
Chicago, IL

Structural Calculations
Shoring Tower Analysis

Book 1 of 1
Calculation Release #1

Prepared for
Metropolitan Steel, Inc.
Lansing, IL

Digitally signed by Amber Dellangelo
Date: 2018.06.15 12:08:06 -05'00'

6/15/18 EXP 11/30/18

Larson Engineering, Inc.
Illinois Office
Project Number 21180240.000
IL Design Firm No. 184-001442

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Naperville, IL 60563-6503
630.357.0540 Fax: 630.357.0164
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SHORING TOWER MAT ANALYSIS..... 500

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LAKE ST TEMPORARY SHORING
CHICAGO, IL

DESIGN CRITERIA

CLIENT:
METROPOLITAN STEEL, INC.
LANSING, IL

Larson Engineering, Inc.
1488 Bond Street, Suite 100
Naperville, Illinois 60563
630.357.0540 Fax: 630.357.0164
www.larsonengr.com

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SUBJECT Lake St. Temporary Shoring SHEET NO. ____ OF ____
Chicago, IL PROJECT NO. 21180240.000
Design Criteria BY JJG DATE 4/26/18

DESIGN CRITERIA

Project Name: Lake St. Temporary Shoring

Project Location: Chicago, IL

Project Number: 21180240.000

Client Name: Metropolitan Steel, LLC.

Applicable Codes: CTA IDCM Rev 4 and AREMA-2014

Design Loads:
See 100

Material Properties:
*Wide Flange: ASTM A992 F_y=50ksi, F_u=65ksi
*Channels, Angles & Plates: ASTM A36 F_y=36ksi, F_u=58ksi
*Bolts: ASTM A325-SC
*Steel Weld F_{exx}= 70 ksi

Per EJM Engineering calculations dated 6/20/17 the assumed dead load reaction of the existing structure at the shoring towers is as follows:
1) Exterior Stringer: 16.93 kip
2) Interior Stringer: 15.08 kip
3) Cross Girder Bent 2221: 87.8 kip
4) Cross Girder Bent 2220: 90.01 kip

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LAKE ST TEMPORARY SHORING
CHICAGO, IL

LOAD DETERMINATION

CLIENT:
METROPOLITAN STEEL, INC.
LANSING, IL

Larson Engineering, Inc.
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SUBJECT LAKE ST SHORING
CHICAGO, IL
SHORING TOWER ANALYSIS

SHEET NO. OF
PROJECT NO. 21180240.000
BY JJG DATE 4/5/18
CHECKED BY:

LOAD DETERMINATION

2 LOAD CASES FOR SHORING TOWERS SHOWN ON S-4 & S-5

CASE 1: LOAD PER S-4:

$DL + LL + I = 233^K / 3 \text{ STRINGERS} = 78^K$ PER STRINGER

CASE 2: LOAD PER S-5: 90^K PER STRINGER

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LAKE ST TEMPORARY SHORING
CHICAGO, IL

SHORING TOWER ANALYSIS

CLIENT:
METROPOLITAN STEEL, INC.
LANSING, IL

Larson Engineering, Inc.
1488 Bond Street, Suite 100
Naperville, IL 60563-6503
630.357.0540 Fax:630.357.0164
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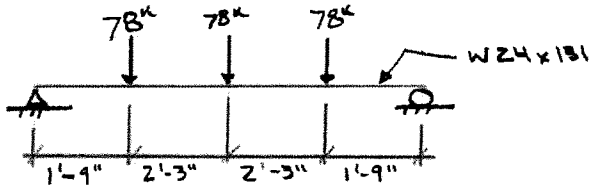
SUBJECT: LAKE ST SHORING — CHICAGO, IL — SHORING TOWER ANALYSIS
SHEET NO. OF
PROJECT NO. 2118O240.000
BY JSG DATE 4/5/18
CHECKED BY:

CHECK SHORING TOWER BEAM SUPPORTING STRINGERS

LOAD CASE 1:



R = 117K

$M_{MAX} = 292.5$ K-FT

$F_y = 0.55(50) - \frac{0.55(50)^2}{6.3\pi^2(29000)}\left(\frac{8(12)}{2.97}\right)^2 = 27.5 - 0.8 = 26.7$ KSI

OR $F_y = \frac{0.131\pi^2(29000)}{\left(\frac{8(12)(24.5)\sqrt{1+0.3}}{12.9^2(0.96")}\right)} = 55$ KSI $> 0.55F_y$

$M_{ALL} = 26.7$ KSI$(329\ in^3) = 8784$ K-IN/12 $= 732$ K-FT $> M_{MAX}$ OK

$\Delta = 0.058" < 4/640 = 0.15"$ OK

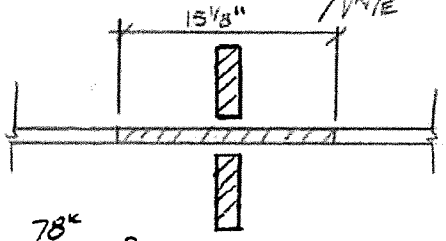
CHECK BEARING STIFFENERS: PL 1¼" x 6⅛"

@ MIDSPAN:

$L_b = 25t_w = 25(0.605") = 15\frac{1}{8}"$ $\quad r = 1\frac{1}{4}"/\sqrt{12} = 0.361"$

$KL/r = \frac{0.75(20\frac{3}{4}")}{0.361"} = 43.1 > \frac{0.629}{\sqrt{F_y/E}} = 17.9$

$KL/r = 43.1 < \frac{5.304}{\sqrt{F_y/E}} = 150 \Rightarrow F_c = 0.6F_y - \left(17{,}500\frac{F_y}{E}\right)^{3/2}\left(\frac{KL}{r}\right)$



$A = 2(6\frac{1}{8}")(1\frac{1}{4}") + 15\frac{1}{8}"(0.605") = 24.4\ in^2$

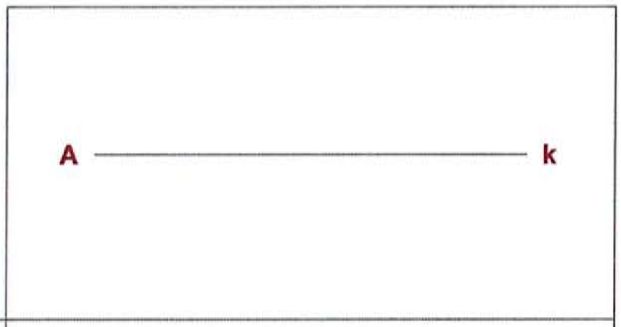
$f_c = \frac{78^K}{A} = 3.2$ KSI

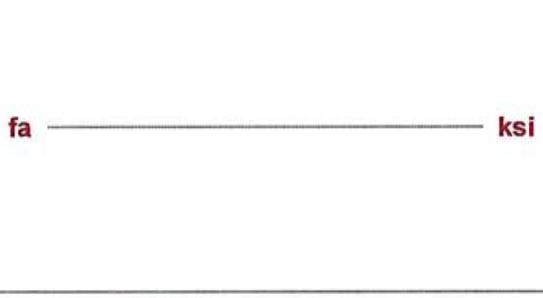
$F_c = 0.6(36{,}000) - \left(17{,}500\frac{36{,}000}{29{,}000{,}000}\right)^{3/2}(43.1) = 17.2$ KSI $> f_c$ OK

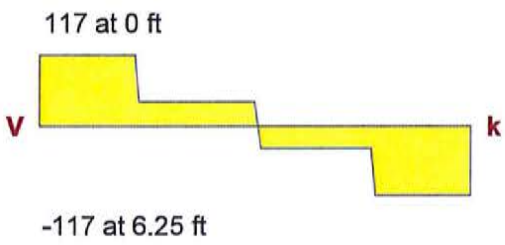
$t_{MIN} = \frac{6\frac{1}{8}"}{0.43\sqrt{E/F_y}} = 0.5" < t = 1\frac{1}{4}"$ OK

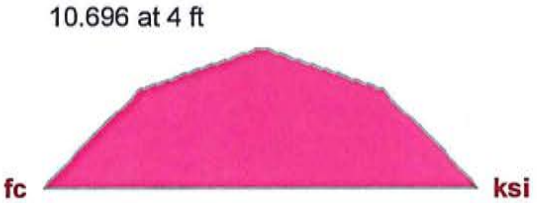
Beam: ***M1***

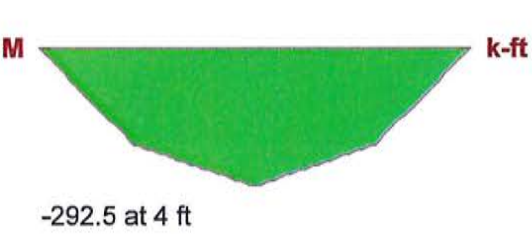
Shape: **W24x131**
Material: **A992**
Length: **8 ft**
I Joint: **N1**
J Joint: **N5**
LC 1:
Code Check: **0.395 (shear)**
Report Based On 97 Sections

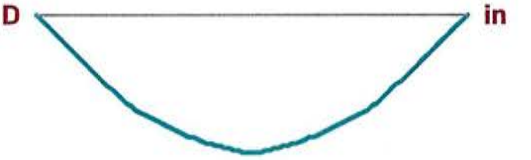












AISC 13th(360-05): ASD Code Check

Direct Analysis Method

Max Bending Check	**0.317**	Max Shear Check	**0.395**
Location	**4 ft**	Location	**0 ft**
Equation	**H1-1b**	Max Defl Ratio	**L/1669**
Bending Flange	**Compact**	Compression Flange	**Non-Slender** **Qs=1**
Bending Web	**Compact**	Compression Web	**Slender** **Qa=.998**

			Out Plane	In Plane
Fy	**50 ksi**	Lb	**8 ft**	**8 ft**
Pnc/om	**1068.409 k**	KL/r	**32.346**	**9.407**
Pnt/om	**1155.689 k**			
Mn/om	**923.154 k-ft**	L Comp Flange	**8 ft**	
Vn/om	**296.45 k**	Tau_b	**1**	
Cb	**1.147**			

Larson Engineering, Inc.
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SUBJECT LAKE ST SHORING — CHICAGO, IL — SHORING TOWER ANALYSIS

SHEET NO. OF
PROJECT NO. 211802H0.000
BY SSG DATE 4/18/18
CHECKED BY:

@ END SPAN:

$L_b = 12t_w = 12(0.605") = 7.26"$ $\quad r = 0.36"$

$KL/r = 0.75(20\frac{3}{4}")/0.36" = 43.1$, $\quad A = 2(6\frac{1}{8}")(1\frac{1}{4}") + 7.26"(0.605") = 19.7\ in^2$

$f_c = \frac{117^K}{A} = 5.9\ KSI$

$F_c = 0.6(36) - (17{,}500\frac{36}{29{,}000})^{3/2}(43.1) = 17.2\ KSI > f_c$ OK

$t_{MIN} = 0.5" < t = 1\frac{1}{4}"$ OK

CHECK BEARING STIFFENERS IN W12x136: PL $1" \times 5\frac{3}{4}"$

ONLY ENDSPAN CONDITIONS:

$L_b = 12t_w = 12(0.79") = 9.48"$, $\quad r = 1"/\sqrt{12} = 0.289"$

$KL/r = 0.75(9\frac{1}{8}")/0.289" = 23.7 > 0.629\sqrt{F_y/E} = 17.9$

$5.304/\sqrt{F_y/E} = 150 > KL/r \Rightarrow F_c = 0.6F_y - (17{,}500\frac{F_y}{E})^{3/2}(KL/r)$

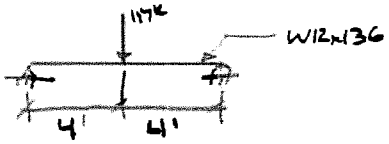
$A = 2(5\frac{3}{4}")(1") + (9.48")(0.79") = 19\ in^2$

$f_c = 117^K/A = 6.2\ KSI$

$F_c = 0.6(36{,}000) - [(17{,}500\frac{36}{29{,}000})^{3/2}(23.7)] = 19.2\ KSI > f_c$ OK

$t_{MIN} = \frac{5\frac{3}{4}"}{0.43\sqrt{E/F_y}} = 0.47" < t = 1"$ OK

CHECK W12x136 BEAM:



$R = 58.5^K$

$M_{MAX} = 234\ K\text{-}FT$

$F_y = 0.55(50) - \frac{0.55(50)^2}{6.3\pi^2(29{,}000)}(\frac{8(12)}{3.16}) = 27.4\ KSI$

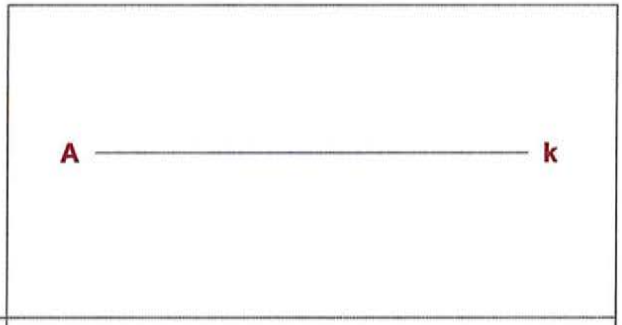
OR $F_y = \frac{0.131\pi^2(29{,}000)}{(\frac{8(12)(13.4)11.3}{(12.4)(1.25)})} = 126\ KSI > 0.55F_y$

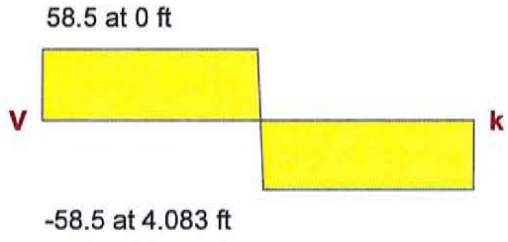
$M_{ALL} = 27.4\ KSI(186\ in^3) = 424\ K\text{-}FT > M_{MAX}$ OK

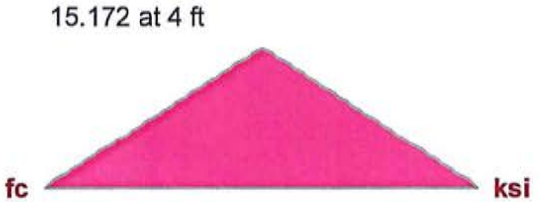
$\Delta = 0.104" < 4/640 = 0.15"$ OK

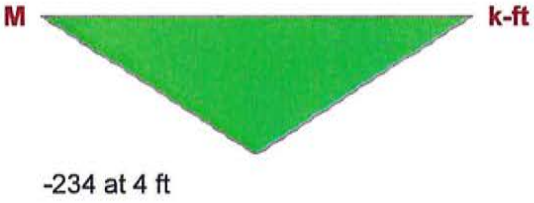
Beam: ***M4***

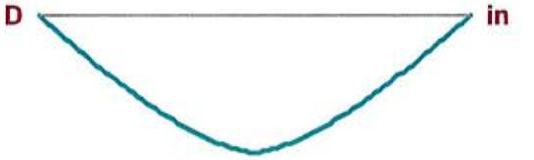
Shape: **W12x136**
Material: **A992**
Length: **8 ft**
I Joint: **N16**
J Joint: **N18**
LC 1:
Code Check: **0.438 (bending)**
Report Based On 97 Sections











AISC 13th(360-05): ASD Code Check

Direct Analysis Method

Max Bending Check	**0.438**	Max Shear Check	**0.276**
Location	**4 ft**	Location	**0 ft**
Equation	**H1-1b**	Max Defl Ratio	**L/922**
Bending Flange	**Compact**	Compression Flange	**Non-Slender**
Bending Web	**Compact**	Compression Web	**Non-Slender**

			Out Plane	In Plane
Fy	**50 ksi**	Lb	**8 ft**	**8 ft**
Pnc/om	**1116.575 k**	KL/r	**30.396**	**17.221**
Pnt/om	**1194.611 k**			
Mn/om	**533.932 k-ft**	L Comp Flange	**8 ft**	
Vn/om	**211.72 k**	Tau_b	**1**	
Cb	**1.316**			

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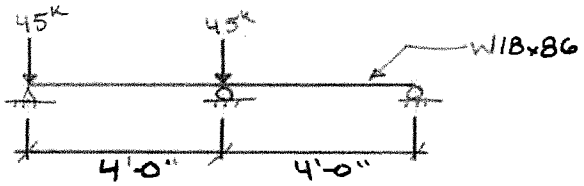
SUBJECT LAKE ST SHORING
CHICAGO, IL
SHORING TOWER ANALYSIS

SHEET NO. OF
PROJECT NO. 21180240.000
BY JJG DATE 4/18/18
CHECKED BY:

LOAD CASE 2:



$R_1 = 45^K$

LOAD GOES DIRECTLY INTO SUPPORTS => NO BENDING IN BEAM

CHECK BEARING STIFFENERS: PL 3/4" x 6"

ONLY "END SPANS" CONDITION:

$L_b = 12(t_w) = 12(0.48") = 5.76"$ $\quad r = 3/4"/\sqrt{12} = 0.217"$

$\frac{KL}{r} = 0.75(15.125")/0.217" = 52.3 > 0.62\sqrt{F_y/E}$

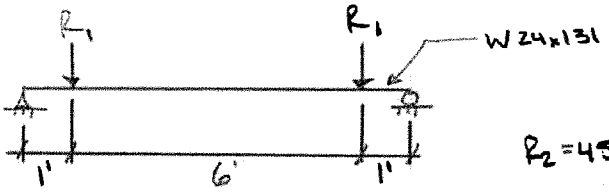
$5.304/\sqrt{F_y/E} > \frac{KL}{r} \Rightarrow F_c = 0.6F_y - (17{,}500\frac{F_y}{E})^{3/2}(KL/r)$

$A = 2(6")(3/4") + 5.76"(0.48") = 11.76\ in^2$

$f_c = 45^K/A = 3.8\ KSI$

$F_c = 16.3\ KSI > f_c$ OK

$t_{MIN} = \frac{6"}{0.43\sqrt{E/F_y}} = 0.5" < t = 3/4"$ OK



$R_2 = 45^K$

$M_{MAX} = 45\ K\text{-}FT$

$F_y = 0.55(50) - \frac{0.55(50)^2}{6.3\pi^2(29{,}000)}\left(\frac{8'(12)}{2.97}\right)^2 = 26.7\ KSI$

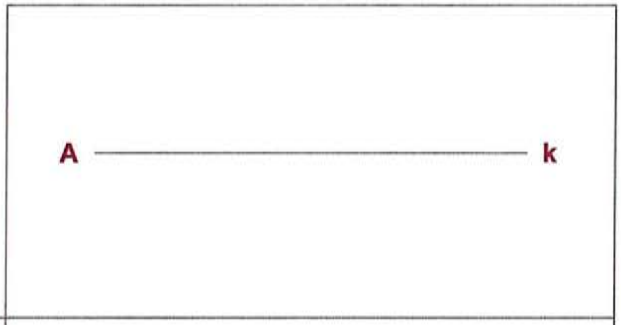
OR $F_y = \frac{0.131\pi(29{,}000)}{\left(\frac{8(12)(24.5)}{12.9"(0.96"}\right)^{1.07}} = 55\ KSI > 0.55F_y$

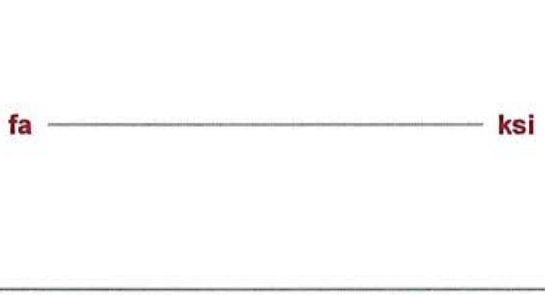
$M_{ALL} = 26.7\ KSI(329\ in^3) = 8784\ K\text{-}IN/12 = 732\ K\text{-}FT > M_{MAX}$ OK

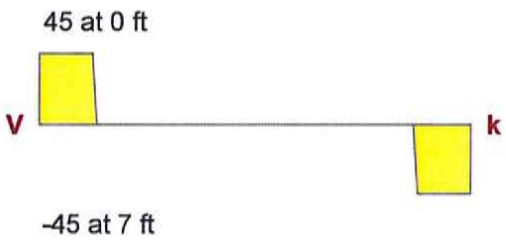
$\Delta = 0.01 < 4/640 = 0.15"$ OK

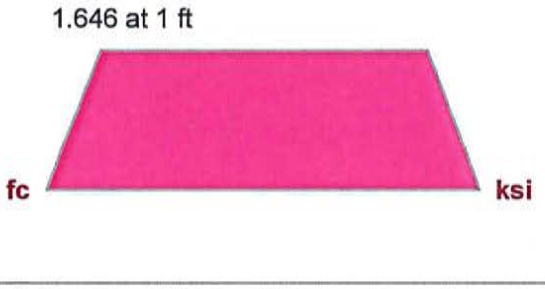
Beam: ***M2***

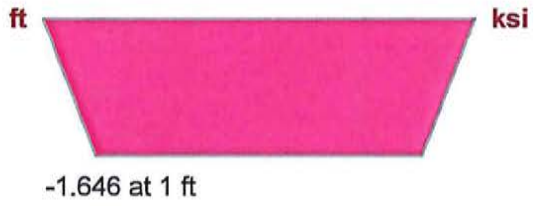
Shape: **W24x131**
Material: **A992**
Length: **8 ft**
I Joint: **N6**
J Joint: **N9**
LC 1:
Code Check: **0.152 (shear)**
Report Based On 97 Sections

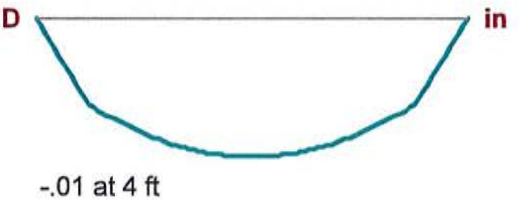












AISC 13th(360-05): ASD Code Check

Direct Analysis Method

Max Bending Check	**0.049**	Max Shear Check	**0.152**
Location	**1 ft**	Location	**7 ft**
Equation	**H1-1b**	Max Defl Ratio	**L/9509**
Bending Flange	**Compact**	Compression Flange	**Non-Slender** **Qs=1**
Bending Web	**Compact**	Compression Web	**Slender** **Qa=.998**

			Out Plane	In Plane
Fy	**50 ksi**	Lb	**8 ft**	**8 ft**
Pnc/om	**1068.409 k**	KL/r	**32.346**	**9.407**
Pnt/om	**1155.689 k**			
Mn/om	**923.154 k-ft**	L Comp Flange	**8 ft**	
Vn/om	**296.45 k**	Tau_b	**1**	
Cb	**1**			

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CHICAGO, IL
SHORING TOWER ANALYSIS

SHEET NO. OF
PROJECT NO. 211802 40.000
BY SSG DATE 4/18/18
CHECKED BY:

CHECK BEARING STIFFENERS:

=> SEE PREVIOUS CALCS FOR BEARING STIFFENERS

=> OK BY INSPECTION

MAX LOAD ON COLUMNS FROM LOAD CASE 1 & 2:

$P_{MAX} = 58.5^K$

COLUMN SIZE: W12x96

USE $L = 9$ FT, $r = 3.09"$, $K = 7/8$ FOR PINNED ENDS

$KL/r = \frac{(7/8)(9\text{ FT})(12)}{3.09"} = 30.6 > \frac{0.629}{\sqrt{F_y/E}} = 15.1$

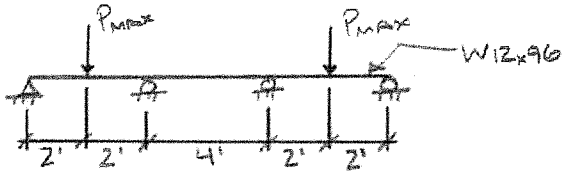
$\frac{5.34}{\sqrt{F_y/E}} = 127.7 > KL/r \Rightarrow F_c = 0.6F_y - \left[(17{,}900\frac{F_y}{E})^{3/2}(KL/r)\right]$

$F_c = 24.9$ KSI

$A_g = 28.2$ IN^2

$P_{ALL} = F_c(A_g) = 702^K > P_{MAX}$ OK

CHECK LOWER W12x96:



$R = 33.1^K < 117^K$ => SEE PREVIOUS CALCS FOR BEARING STIFFENERS

OK BY INSPECTION

$M_{MAX} = 51$ K-FT

$F_y = 0.55(50) - \frac{0.55(50)}{6.3\text{ ft}^3(29{,}000)}\left(\frac{4'(12)}{3.09"}\right)^2 = 27.5$ KSI

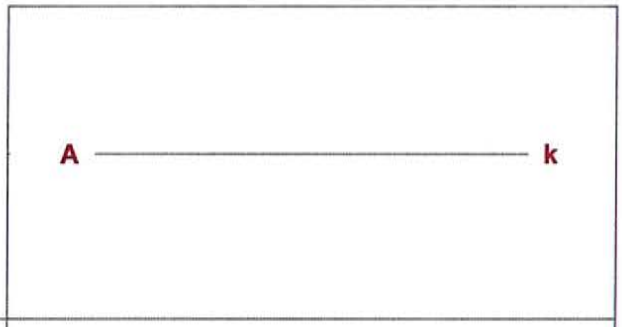
OR $F_y = \frac{0.131\pi(29{,}000)}{\left(\frac{4(12)(12.7)\sqrt{7+0.5}}{12.2(0.9)}\right)} = 188.5 > 0.55F_y$

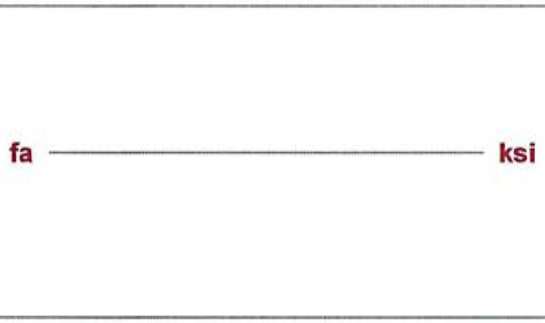
$M_{ALL} = 27.5\text{ KSI}(131\text{ IN}^3) = 300$ K-FT $> M_{MAX}$ OK

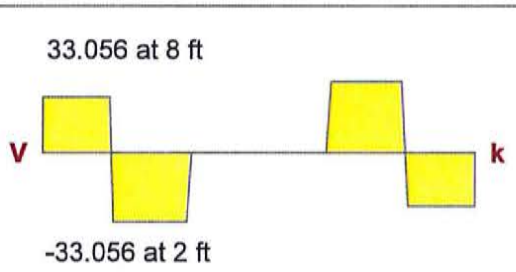
$\Delta = 0.016" < L/640 = 0.225"$ OK

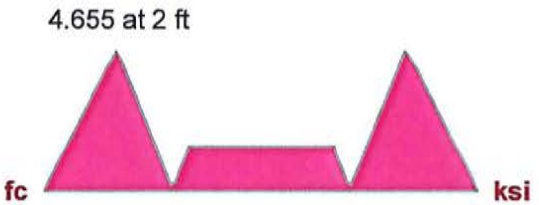
Beam: ***M3***

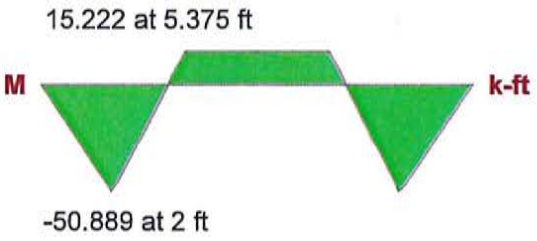
Shape: **W12x96**
Material: **A992**
Length: **12 ft**
I Joint: **N10**
J Joint: **N15**
LC 1:
Code Check: **0.237 (shear)**
Report Based On 97 Sections

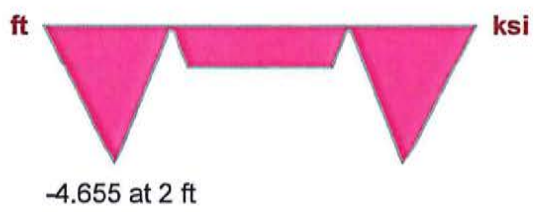


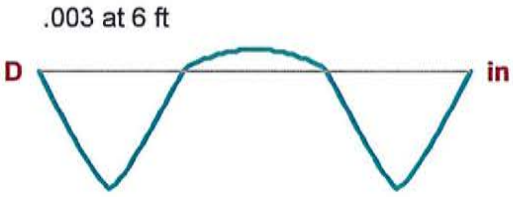












AISC 13th(360-05): ASD Code Check

Direct Analysis Method

Max Bending Check	**0.139**	Max Shear Check	**0.237**
Location	**2 ft**	Location	**2 ft**
Equation	**H1-1b**	Max Defl Ratio	**L/8847**
Bending Flange	**Compact**	Compression Flange	**Non-Slender**
Bending Web	**Compact**	Compression Web	**Non-Slender**

			Out Plane	In Plane
Fy	**50 ksi**	Lb	**12 ft**	**12 ft**
Pnc/om	**720.66 k**	KL/r	**46.538**	**26.495**
Pnt/om	**844.311 k**			
Mn/om	**366.766 k-ft**	L Comp Flange	**12 ft**	
Vn/om	**139.7 k**	Tau_b	**1**	
Cb	**2.155**			

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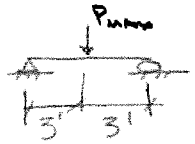
CHICAGO, IL
SHORING TOWER ANALYSIS

SHEET NO. OF
PROJECT NO. 21180240.000
BY JJG DATE 4/27/18
CHECKED BY:

CHECK BEAM STABILITY OF GRILLAGE BEAM: W12x96

$l' = 4' + 2(1') = 6'$

$P_{MAX} = 58.5^K$



$M = P_{MAX}(l')/4 = 87.75$ K-FT

=> $M_{ALL} = 300$ K-FT > M OK

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LAKE ST TEMPORARY SHORING
CHICAGO, IL

LATERAL ANALYSIS

CLIENT:
METROPOLITAN STEEL, INC.
LANSING, IL

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SUBJECT LAKE ST SHORING — CHICAGO, IL — SHORING TOWER ANALYSIS
SHEET NO. 400 OF
PROJECT NO. 21180240.000
BY JJG DATE 4/5/18
CHECKED BY:

CHECK VERTICAL BRACING OF SHORING TOWERS

$P = 0.005(202^K) = 18^K$ ← VERIFY BRACING CAN BRACE COLUMN FOR ECCENTRICITY OF LOAD
(CAPACITY ↑ OF COLUMNS)

CHECK COMPRESSION IN ANGLE: L4x4x1/2

$L = 54"$ (CONSERVATIVE)

$r = 1.21"$

$K = 7/8$

$KL/r = 43.4 > 0.629/\sqrt{F_y/E} = 17.9$ $\left[\frac{KL}{r} < 120 \quad \text{OK}\right]$

$5.304/\sqrt{F_y/E} = 150.5 > KL/r \Rightarrow F_c = 0.6F_y - \left[(17{,}500\frac{F_y}{E})^{3/2}(KL/r)\right]$

$F_c = 21.4$ KSI

$A_g = 3.75$ IN^2

$P_{ALL} = F_c(A_g) = 80^K > P$ OK

CHECK BRACE TO GUSSET R CONN: (3) 7/8" ϕ A325-SC BOLTS

$f_v = \frac{P}{3(\frac{\pi}{4})(7/8")^2} = 10$ KSI

$F_v = 17$ KSI $> f_v$ OK

CHECK BOLT BEARING:

$F_{BRG} = 11.5^*(58\text{ KSI})/2(7/8") \leq 1.0(58\text{ KSI}) = 49.7\text{ KSI}(1/2")(7/8") = 21.7^K > P$ OK

CHECK GUSSET COMPRESSION: 5/8" GUSSET

$L = 18"$ (CONSERVATIVE) $\quad r = 5/8"/\sqrt{12} = 0.18"$

$\frac{0.629}{\sqrt{F_y/E}} = 17.9 \leq \frac{(7/8)18"}{0.18"} = 87.5 < 5.304/\sqrt{F_y/E} = 150.5$

$F_c = 0.6(36{,}000) - \left[(17{,}500\frac{36{,}000}{29{,}000{,}000})^{3/2}(KL/r)\right] = 12.74$ KSI

$W_t = 2(6")\tan(30) = 6.93"$

$P_{ALL} = 12.74\text{ KSI}(6.93")(5/8") = 55.2^K > P$ OK

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Lake St Shoring
Steel Beam Braced Frame Calcs

PROJECT NO. 21180240.000
BY JJG DATE 04/26/2016

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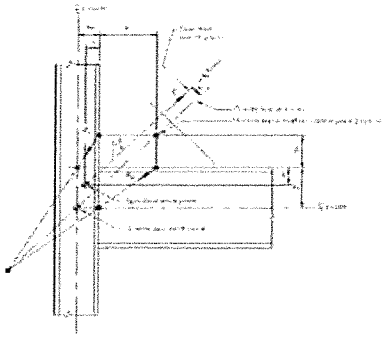
AISC 14th Edition - Uniform Force Method - LRFD
For General Case, Special Case II, and Special Case III

Braced Frame Connection:



Attachment To	COLUMN WEB	
Column	W12x96	Design Column Shape
Brace	L4x4x1/2	Design Brace Shape
t_g	0.6250 in	Gusset Plate Thickness
$F_{y\ gusset}$	36 ksi	Gusset Yield Stress
$F_{u\ gusset}$	58 ksi	Gusset Ultimate Tensile Stress
$F_{u\ baseplate}$	58 ksi	Baseplate Ultimate Tensile Stress
w_g	14.5 in	Width of Gusset Along Baseplate
Brace Rise =	12 in	
Brace Run =	8.625 in	
θ =	45.30 degrees	
e_b =	0.25 in	Supporting Base Plate Eccentricity
e_c =	0.00 in	Supporting Column Eccentricity
α-bar =	7.25 in	Horizontal Distance from Column to Center of Gusset to Baseplate Weld
β-bar =	7.75 in	Vertical Distance from Baseplate to Center of Gusset to Col Weld

Pu = 18 kips Brace Force

$K = (e_b \tan\theta) - e_c =$	0.25
$K' = \alpha\text{-bar} * \tan\theta + (\alpha\text{-bar} / \beta\text{-bar}) =$	8.26
$D = \tan^2\theta + (\alpha\text{-bar} / \beta\text{-bar})^2 =$	1.90
$\alpha = (K' * \tan^2\theta + K * (\alpha\text{-bar} / \beta\text{-bar})^2) / D =$	4.57
$\beta = (K' - K\tan\theta) / D =$	4.22
$r=((\alpha+e_c)^2 + (\beta+e_b)^2)^{\wedge}1/2=$	6.39

ITERATE

Preliminary Forces

Vuc =	11.9 kips	Required Shear Force on the Gusset Column Connection
Huc =	0.0 kips	Required Axial Force on the Gusset to Column Connection
Vub =	0.7 kips	Required Shear Force on the Gusset to Base Plate Connection
Hub =	12.9 kips	Required Axial Force on the Gusset to Base Plate Connection
Mub =	1.9 kip-in	Required Moment on the Gusset to Baseplate Connection
Muc =	0.0 kip-in	Required Moment on the Gusset to Column Connection

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SUBJECT LAKE ST SHORING — CHICAGO, IL — SHORING TOWER ANALYSIS
SHEET NO. OF 402
PROJECT NO. 21180240.000
BY JJG DATE 4/24/18
CHECKED BY:

CHECK GUSSET TO BASEPLATE INTERFACE:

$M = 1.9$ K-IN
$V = 0.7$K
$A = 12.9$K => GUSSET PLATE TENSION/COMPRESSION CAPACITY OK BY INSPECTION PER PREVIOUS CALCS

CHECK WELD:

$S_x = (12)^2/3 = 48\ IN^2$ $\quad A = 24$

$f_t = \frac{M}{S_x} + \frac{P_A}{A} = \frac{1.9\ K\cdot IN}{48} + \frac{12.9}{24} = 0.6KPI$

$f_v = \frac{V}{A} = \frac{0.7}{24"} = 0.03KPI$

$f_r = \sqrt{f_t^2 + f_v^2} = 0.6KPI$

$f_n = 0.35(36)(1/4" - 1/8") = 1.575\ KPI > f_r$ OK

CHECK BEARING IN GUSSET:

$S = 1/6\,(12")^2(5/8") = 15\ IN^3$
$M_{ALL} = 0.55(36)(15) = 297\ K\text{-}IN \gg M$ OK

CHECK GUSSET TO COLUMN INTERFACE:
$V = 11.9K$ => OK BY INSPECTION PER PREVIOUS CALCS

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SUBJECT Lake Street Shoring
Chicago, IL

SHEET NO. OF 403
PROJECT NO. 21180240
BY RAF DATE 6/15/18
CHECKED BY:

LATERAL ANALYSIS OF TOWER

- PHASE 1 - (STRINGER SUPPORT)

FROM EJM CALCS DATED 6/20/17 → WLTLF = 21K → N/S FACE

WF = 11K → E/W FACE — FROM EJM CALCS DATED 6/20/17

DEAD LOAD STRINGER REACTION = 15.1K

CONSV [SELF WEIGHT OF TOWER = 86(8)2 + 131(8)3 + 136(2)8
+ 6.33(4)(96) + 96(16)2 + 96(4)(16)1
+ 12.8(4)10.2 + 12.8(4)8.8 = 19.3K

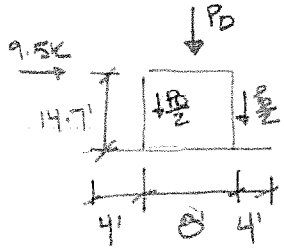
PD = TOTAL DEAD WEIGHT = 15.1(2) + 19.3 = 50K

SLIDING — WIND ONLY, LF — [LIVE LOAD WOULD INCREASE LATERAL BUT ALSO WEIGHT

LATERAL FORCE PL = 21 − 11.4 = 9.5K μ = 0.28

PRESISTING = 50μ = 14K / 9.5 ≥ 1.5 ∴ OK

OVERTURNING



$M_O = 9.5(14.7) = 140K\cdot FT$

$M_R = 25(4) + 25(12) = 400K\cdot FT$ FOS = 2.9 OK

TOWER IS OK FOR SLIDING & OVERTURNING

CONNECTION BETWEEN TOWER & WOOD TIMBER

$V_{ACT} = 21/32 = 656\,lb/BOLT$

- SEE FOLLOWING PAGES FOR LAG BOLT ANALYSIS

PROVIDE ⅞" ϕ A307 w/ 5" PENETRATION @ 2'OC

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SUBJECT Lake Street Shoring
Chicago, IL

SHEET NO. OF 404
PROJECT NO. 21180240
BY RAF DATE 6/15/18
CHECKED BY:

-PHASE 2- (CROSS GIRDER SUPPORT)

FROM EJM CALLS DATED 6/20/17 → WL+LF = 21K

↓

DEAD LOAD FROM CROSS GIRDER = 88K

N/S FACE

WF =

E/W FACE

WEIGHT OF TOWER = 19.3K

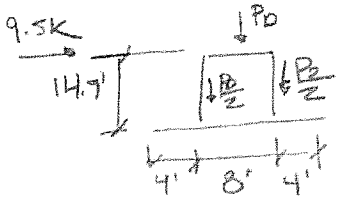
P_D = TOTAL DEAD = 107K

SLIDING

LATERAL FORCE : $P_L = 9.5K$ $\mu = 0.28$

$P_{RESISTING} = 107(0.28) = 30 / 9.5 \approx 3.2$ ∴ OK

OVERTURNING



$M_O = 9.5(14.9) = 140K\text{-}FT$

$M_R = \frac{107}{2}(4) + \frac{107}{2}(12) = 856K\text{-}FT$ FOS = 6 | OK

TOWER IS OK FOR SLIDING & OVERTURNING

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Lag Bolt Analysis

SHEET NO. 405
PROJECT NO. 21180240.000
BY RAF DATE 06/06/16

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User Input

$D := 0.875 \cdot in$ nominal shank diameter of wood screw

$F_{yb} := 45000 \cdot psi$ bending yield strength of wood screw (see Table 11K)

$F_{es} := 36000 \cdot psi$ dowel bearing strength of side member (see Table 11.3.2)

$F_{em} := 2850 \cdot psi$ dowel bearing strength of main member (see Table 11.3.2)

$l_m := 5in$ main member dowel bearing length, in.

$l_s := 0.1875in$ side member dowel bearing length, in.

$p := 5in$ penetration of wood screw

$Z_{act} := 656 \cdot lbf$ Actual Shear Force, lbf

$W_{act1} := 0 \cdot lbf$ Actual Withdrawal Force, lbf

$$\alpha := \operatorname{atan}\left(\frac{W_{act1}}{Z_{act}}\right) \cdot \frac{360}{2\pi} \qquad \alpha = 0$$

Adjustment Factors

$C_D := 2.0$	load duration factor	$C_{eg} := 1.0$	end grain factor	$\theta := 90$	direction of grain (θ=0 for parallel to grain, θ=90 for perpendicular to grain)
$C_m := 1.0$	wet service factor	$C_g := 1.0$	group action factor		
$C_t := 1.0$	temperature factor	$C_\Delta := 1.0$	geometry factor		

Calculation of Lateral Design Value (Z must be multiplied by all applicable adjustment factors: CD, Cm, Ct, Ceg, Cg, CΔ)

$$R_e := \frac{F_{em}}{F_{es}} \qquad R_e = 0.079$$

$$R_t := \frac{l_m}{l_s} \qquad R_t = 26.667$$

$$k_1 := \frac{\sqrt{R_e + 2R_e^2\left(1 + R_t + R_t^2\right) + R_t^2 \cdot R_e^3} - R_e\left(1 + R_t\right)}{1 + R_e} \qquad k_1 = 0.855$$

$$k_2 := -1 + \sqrt{2\left(1 + R_e\right) + \frac{2 \cdot F_{yb}\left(1 + 2 \cdot R_e\right) \cdot D^2}{3 \cdot F_{em} \cdot l_m^2}} \qquad k_2 = 0.591$$

$$k_3 := -1 + \sqrt{\frac{2\left(1 + R_e\right)}{R_e} + \frac{2 \cdot F_{yb}\left(2 + R_e\right) \cdot D^2}{3 \cdot F_{em} \cdot l_s^2}} \qquad k_3 = 21.448$$

Reduction Terms

$$K_D := \left[\text{if}\left[D < 0.17 \cdot in, 2.2, \text{if}\left[D < 0.25 \cdot in \wedge D > 0.17 \cdot in, 10\frac{D}{1in} + .5, 4 \cdot \left(1 + 0.25 \cdot \frac{\theta}{90}\right)\right]\right]\right] \qquad K_D = 5$$

$R_d := K_D$

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PROJECT NO. 21180240.000
BY RAF DATE 06/06/16

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Yield Limit States: Table 11.3.1A

Yield Mode	Single Shear		
Im	$Z_1 := \frac{D \cdot l_m \cdot F_{em}}{R_d}$	$Z_1 = 2.5 \times 10^3 \cdot lbf$	(11.3-1)
Is	$Z_2 := \frac{D \cdot l_s \cdot F_{es}}{R_d}$	$Z_2 = 1181.2 \cdot lbf$	(11.3-2)
II	$Z_3 := \frac{k_1 \cdot D \cdot l_s \cdot F_{es}}{0.9 R_d}$	$Z_3 = 1.1 \times 10^3 \cdot lbf$	(11.3-3)
IIIm	$Z_4 := \frac{k_2 \cdot D \cdot l_m \cdot F_{em}}{(1 + 2R_e) 0.8 R_d}$	$Z_4 = 1.6 \times 10^3 \cdot lbf$	(11.3-4)
IIIs	$Z_5 := \frac{k_3 \cdot D \cdot l_s \cdot F_{em}}{(2 + R_e) 0.8 R_d}$	$Z_5 = 1205.8 \cdot lbf$	(11.3-5)
IV	$Z_6 := \frac{D^2}{0.8 R_d} \cdot \sqrt{\frac{2 F_{em} \cdot F_{yb}}{3(1 + R_e)}}$	$Z_6 = 1.704 \times 10^3 \cdot lbf$	(11.3-6)

$Z := \min(Z_1, Z_2, Z_3, Z_4, Z_5, Z_6)$ $\quad Z = 1122.5 \cdot lbf$

$Z_{adj} := Z \cdot C_D \cdot C_m \cdot C_t \cdot C_{eg} \cdot C_g \cdot C_\Delta$ $\quad Z_{adj} = 2245.1 \cdot lbf$

$Z_{\alpha act1} := \sqrt{W_{act1}^2 + Z_{act}^2}$ $\quad Z_{\alpha act1} = 656 \cdot lbf$

$\frac{Z_{\alpha act1}}{Z_{adj}} = 0.292$ ~ 1.0 OK

Provide (1) 7/8" Lag Bolt w/ 9" Penetration

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LAKE ST TEMPORARY SHORING
CHICAGO, IL

SHORING TOWER MAT ANALYSIS

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SUBJECT LAKE ST SHORING	SHEET NO. OF
CHICAGO, IL	PROJECT NO. 21180240.000
TOWER SHORING PLAN	BY JJG DATE 4/18/18
MAT ANALYSIS	CHECKED BY:

CHECK BEARING OF TIMBER MAT:

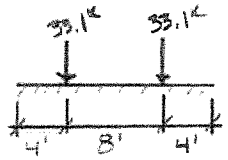
$P = 234^K$

$F_{BRG} = 1{,}000$ PSI

$A_{BRG} = (16')(16') = 256$ FT^2

$f_{BRG} = P/A_{BRG} = 0.914$ KSF $<$ F_{BRG} OK

CHECK GRILLAGE BEAM: W12x96



$w = 33.1^K/8' = 4.1$ K/FT

$M_{MAX} = wL^2/2 = 33$ K-FT

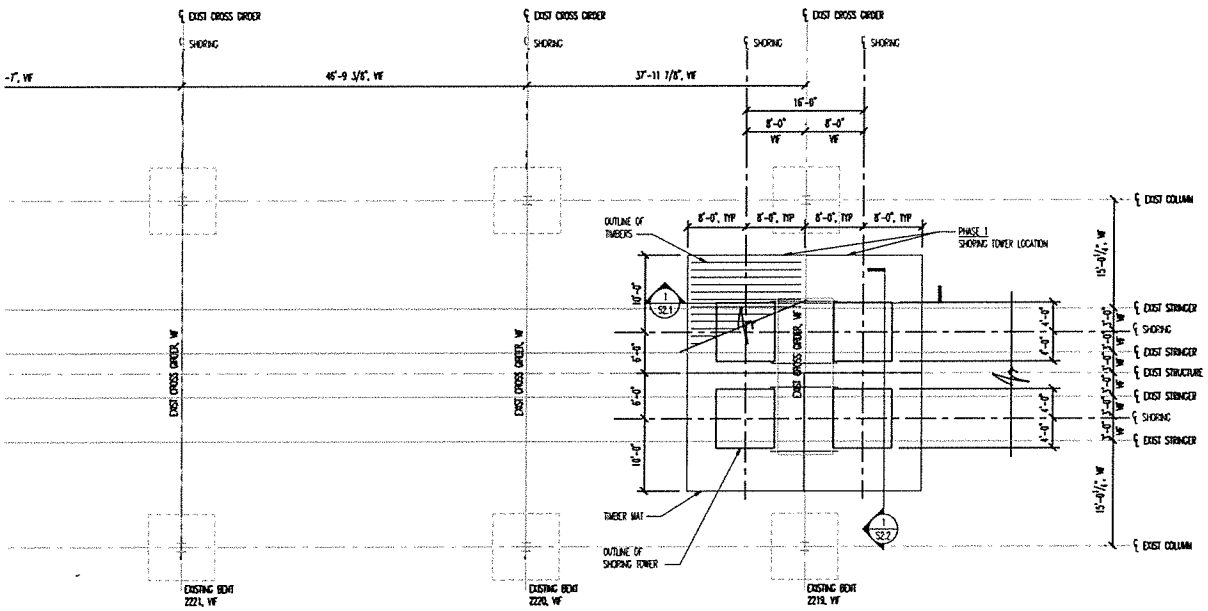
$F_b = 0.55(50{,}000) - \frac{0.55(50{,}000)^2}{6.3\pi^2(29{,}000)}\left(\frac{48}{3.09}\right)^2 = 27.3$ KSI

OR

$F_b = \frac{0.131\pi^2 29{,}000}{\left(\frac{48(12.7)}{(12.2)(0.9)}\right)\sqrt{17.3}} = 188$ KSI $> 0.55F_y$

$f_b = M/S = 3$ KSI $< F_b$ OK

* FOR STIFFENER CHECKS SEE PREVIOUS CALCS



1 / S1.0 PHASE 1 SHORING LAYOUT PLAN
1/8" = 1'-0"

N

FUCTIONS:

NCRETE JERSEY BARRIERS PROTECTION FOR ALL SHORING
) ALLEY OR STREET TRAFFIC. SIDEWALKS MAY NEED TO
AND BLOCKED OFF. JERSEY BARRIERS TO BE ANCHORED
IECTION TO BE VERIFIED BY GENERAL CONTRACTOR.
NTRACTOR TO PROVIDE SMOOTH AND LEVEL TEMPORARY
PADS FOR PLACEMENT OF HARDWOOD MATS.
LL BE ERECTED OVER CRANE MATS AS SHOWN ON THE
OTHER MISC DETAIL CONNECTIONS.
TAKE PLACE DURING SHUTDOWN AND/OR BETWEEN TRAINS

: IS PERMITTED TO EXISTING STRUCTURE.
ITY TO BE 120 KIPS. JACKS TO BE CAPABLE OF
LY LOCKING INTO PLACE SO THAT HYDRAULICS ARE NOT

NSIONS AND ELEVATIONS WITH EXISTING CONDITIONS.
NSIONS WITH NEW WORK AT BENT LINES TO AVOID
ES.

1" 2" 4" 8" 12"
1/4" = 1'-0"

0 1" 2" 4" 6" 9"
3/8" = 1'-0"

0 6" 1' 2' 4' 6'
1/2" = 1'-0"

0 4" 8" 16" 32" 4'
3/4" = 1'-0"

0 3" 6" 1' 2' 3'
1" = 1'-0"

0 2" 4" 6" 16" 2'
1 1/2" = 1'-0"

0 1" 2" 4" 8" 1'
3" = 1'-0"

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CLIENT
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LANSING, IL 60438

TEMPORARY SHORING FOR CTA GREENLINE STATION LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

SEAL
LICENSED STRUCTURAL ENGINEER
LAUREN DELLANGELO
STATE OF ILLINOIS
Digitally signed by Lauren Amber Dellangelo
Date: 2018.05.03 08:43:03 -05'00'

Date: 05/03/2018
IL Design Firm #: 184-001442
Expires: 11/30/2018

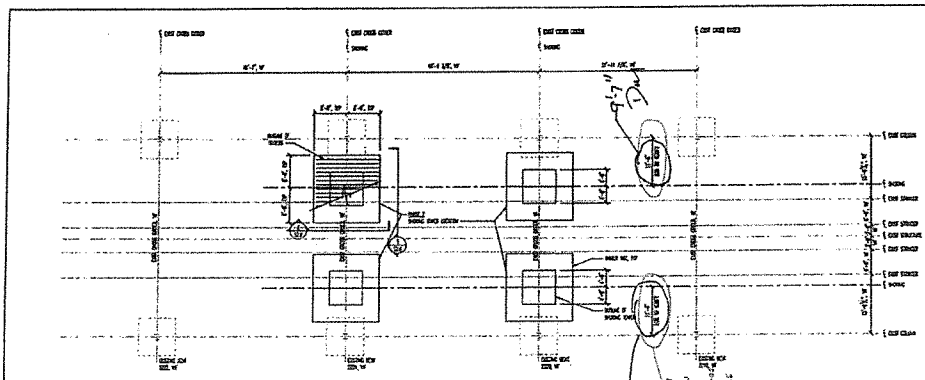
No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 21140240.001
Drawn by: KRH
Checked by: RAF

Sheet Title
PHASE 1 SHORING PLANS

S1.0

Structural Sheet 1 of 7



PHASE 2 SHORING LAYOUT PLAN

9'-7"

9'-7"

Does Not Match Dimension Shown on Submittal 03-0124 For Stiffner Details

SHOP DRAWING REVIEW

Reviewed for general conformance with the design concept of the project and general compliance with the Contract Documents. Approval does not relieve Contractor from compliance with requirements of drawings and specifications. Contractor is responsible for dimensions to be confirmed and correlated at jobsite. Fabrication processes and techniques of construction are the responsibility of the Contractor. Contractor is responsible for coordinating the work with that of all other trades and for performing work in a safe manner.

☒ No Exceptions Taken
☐ Comments Attached
☐ Revise and Resubmit
☐ Rejected - See Remarks

EXIT ENGINEERING, P.C.
CHICAGO, ILLINOIS
By RLR
Date 07/11/12

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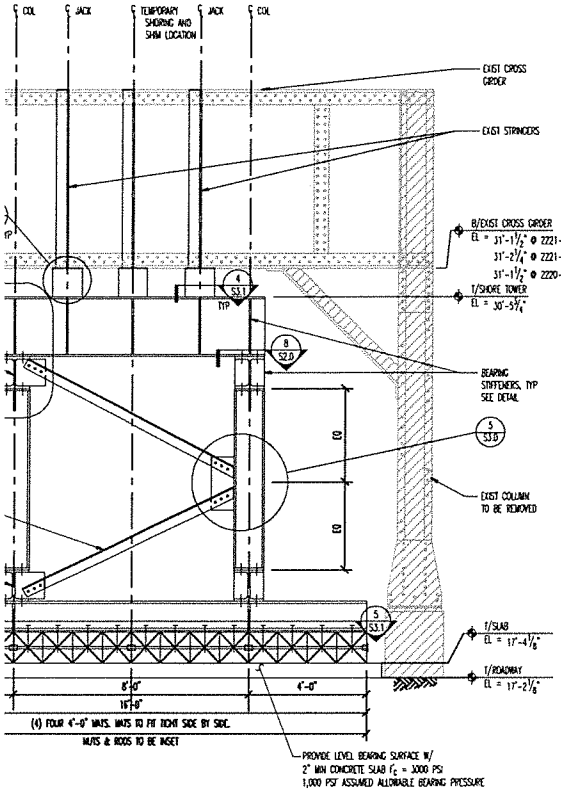
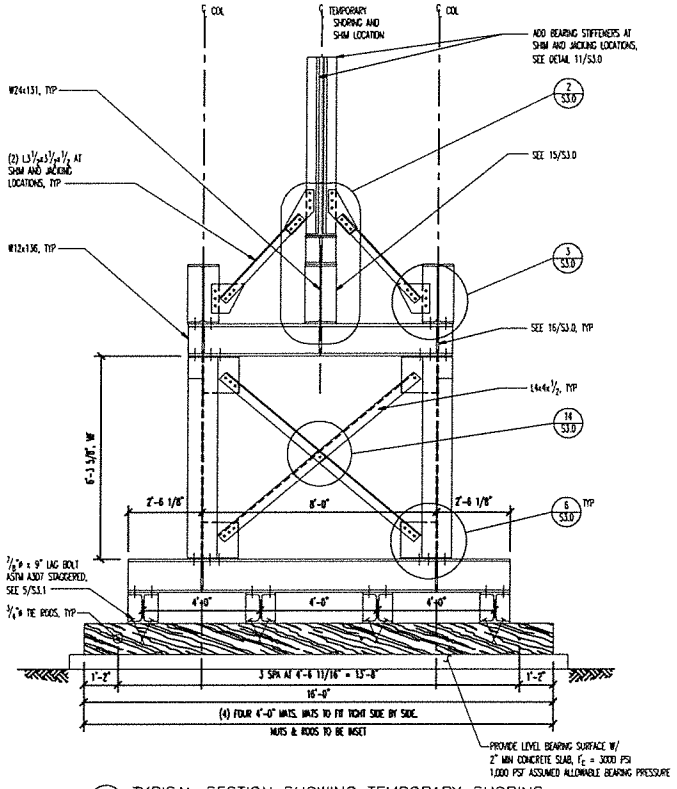
TEMPORARY SHORING FOR CTA CONSTRUCTION LAKE STREET DAMEN AVE TO ASHLAND AVE CHICAGO, IL

PHASE 2 SHORING PLANS

S1.1



L SECTION SHOWING TEMPORARY SHORING



2 S2.0 TYPICAL SECTION SHOWING TEMPORARY SHORING
1/2" = 1'-0"

1' 2' 4' 6' 12'
1/4" = 1'-0"

0 1' 2' 4' 6' 9'
3/8" = 1'-0"

0 6" 1' 2' 4' 6'
1/2" = 1'-0"

0 4" 8" 16" 32" 4'
3/4" = 1'-0"

0 3" 6" 1' 2' 3'
1" = 1'-0"

0 2" 4" 8" 16" 2'
1 1/2" = 1'-0"

0 1' 2' 4' 8" 1'
3" = 1'-0"

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OWNER
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TEMPORARY SHORING FOR CTA GREENLINE STATION
LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

SEAL
ANDREW D. DELLANGELO
061-027282
STATE OF ILLINOIS
Date: 05/30/2018
IL Design Firm #: 184-001442
Expires: 11/30/2019

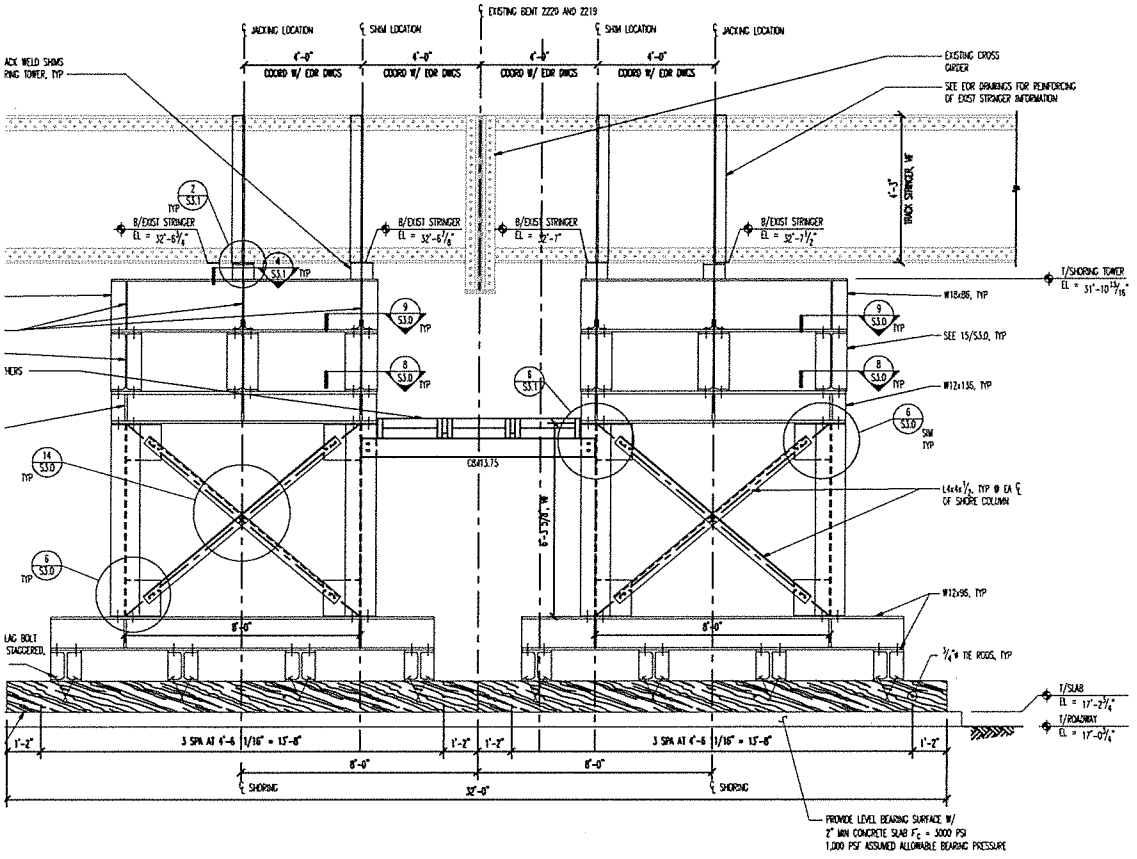
No.	Date	Description
	05/30/2018	ISSUED FOR CONSTRUCTION

Project #: 2118.0340.000
Drawn by: KRH
Checked by: RAF

Sheet Title
PHASE 2
SHORING TOWER SECTIONS

S2.0

Structural Sheet 3 of 7



1 S2.1 TYPICAL SECTION SHOWING STRINGER TEMPORARY SHORING
1/2" = 1'-0"

1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

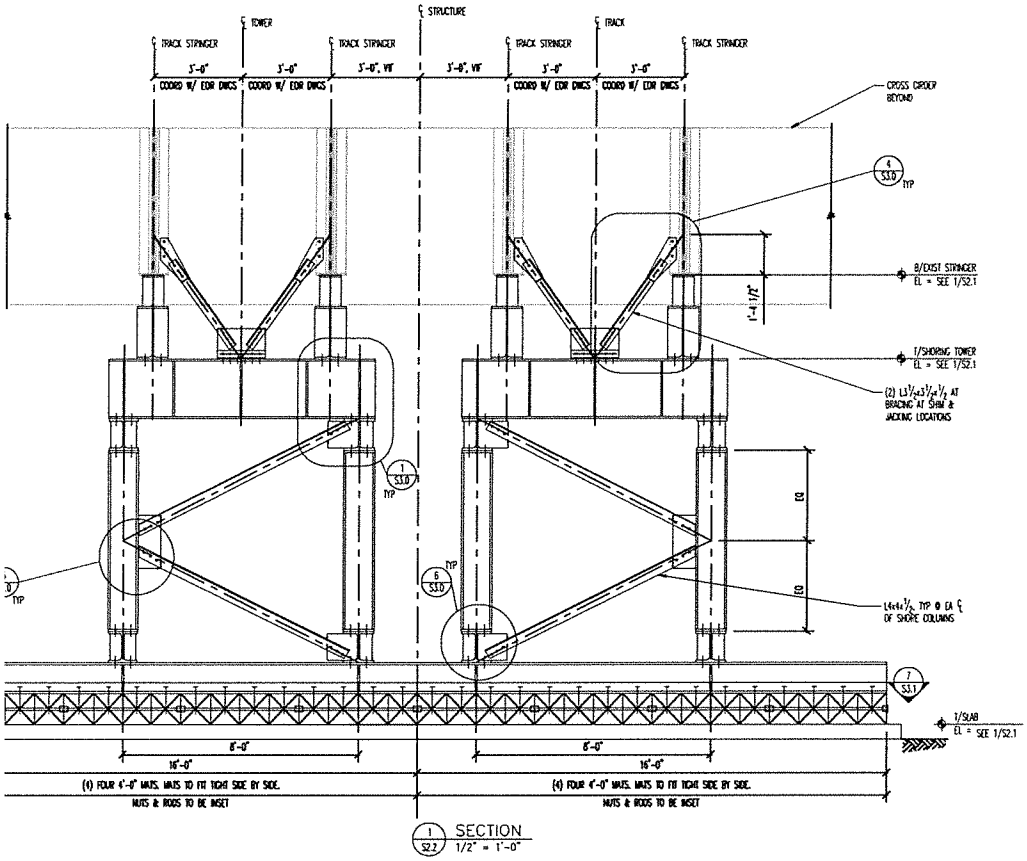
SEAL
ADAM D. DELLANGELO 061-007735 STATE OF ILLINOIS
Date: 05/30/2019 Expires: 11/30/2019
IL Design Firm # : 184-001442

No.	Date	Description
	05/30/2019	ISSUED FOR CONSTRUCTION

Project# : 2118240.005
Drawn by: KRR
Checked by: PAF
Sheet Title:
PHASE 1
SHORING TOWER SECTIONS

S2.1

Structural Sheet: 4 of 7



1 S2.2 SECTION
1/2" = 1'-0"

1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

SEAL
ANDREW R. DELLANGELO 081-037252 STATE OF ILLINOIS PROFESSIONAL STRUCTURAL ENGINEER
Date: 05/03/2018 Expires: 11/30/2018
IL Design Firm #: 184.001462

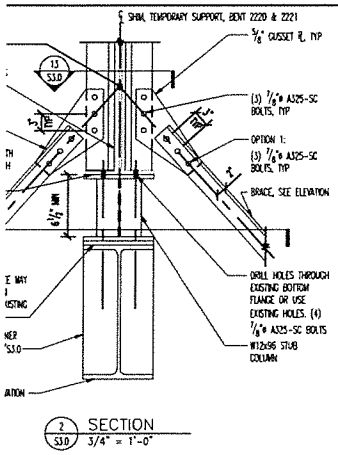
No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 2118.0040.500
Drawn by: KRH
Checked by: RAF

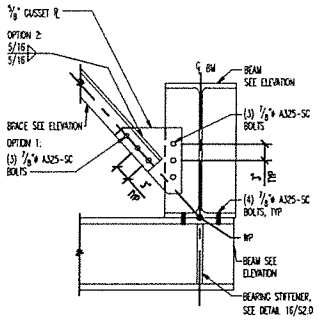
Sheet Title
PHASE 1
SHORING TOWER SECTIONS

S2.2

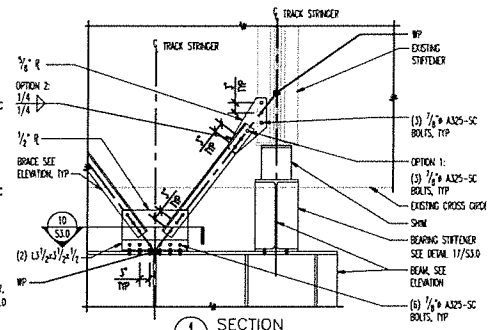
Structural Sheet 5 of 7



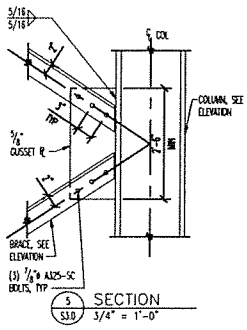
2 S3.0 SECTION 3/4" = 1'-0"



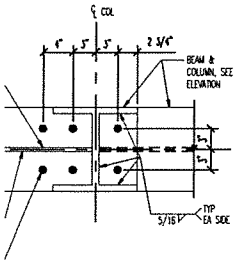
3 S3.0 SECTION 3/4" = 1'-0"



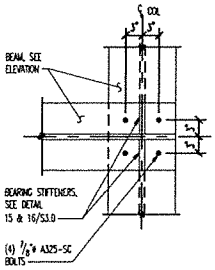
4 S3.0 SECTION 1/2" = 1'-0"



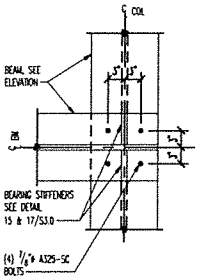
5 S3.0 SECTION 3/4" = 1'-0"



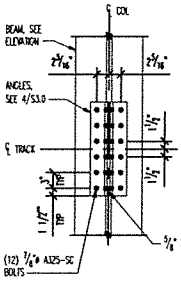
7 S3.0 SECTION 3/4" = 1'-0"



8 S3.0 SECTION 3/4" = 1'-0"



9 S3.0 SECTION 3/4" = 1'-0"



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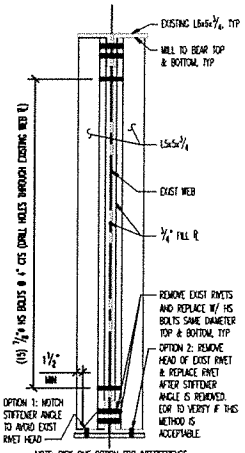

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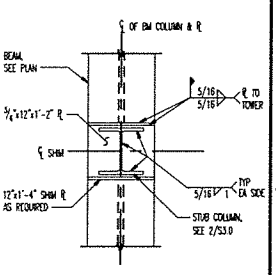

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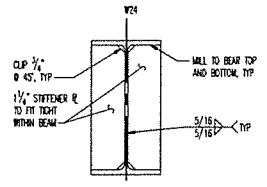
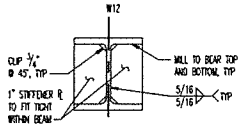
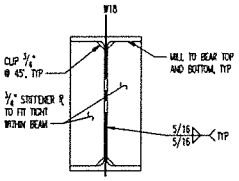


15 S3.0 W24 BEARING STIFFENER DETAIL 3/4" = 1'-0"



16 S3.0 W12 BEARING STIFFENER DETAIL 3/4" = 1'-0"



17 S3.0 W18 BEARING STIFFENER DETAIL 3/4" = 1'-0"

1' 2' 4' 8' 12'
1/4" = 1'-0"

0 1' 2' 4' 6' 9'
3/8" = 1'-0"

0 6" 1' 2' 4' 6'
1/2" = 1'-0"

0 4" 8" 16" 32" 4'
3/4" = 1'-0"

0 3" 6" 1' 2' 3'
1" = 1'-0"

0 2" 4" 8" 16" 2'
1 1/2" = 1'-0"

0 1" 2" 4" 8" 1'
3" = 1'-0"

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Project Permit #: N/A

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CLIENT:
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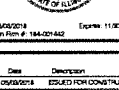
1931 EAST 177TH ST
LANSING, IL 60438

TEMPORARY SHORING FOR CTA GREENLINE STATION
LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

SEAL



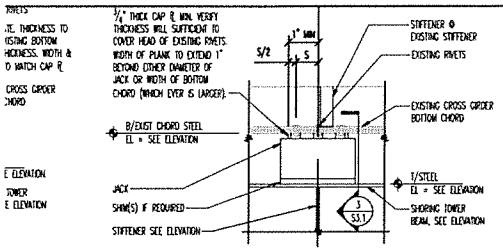
Date: 05/08/2018 Expires: 11/30/2018
IL Design Firm #: 184-001442

No.	Date	Description
	05/08/2018	ISSUED FOR CONSTRUCTION

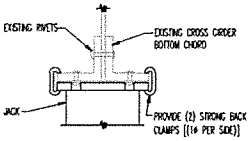
Project#: 2114R240.000
Drawn by: KRR
Checked by: RAF
Sheet Title:
DETAILS

S3.0

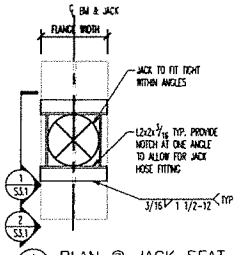
Structural Sheet 6 of 7



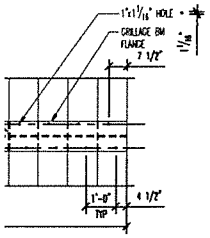
2 / S3.1 TYP JACK DETAIL
1 1/2" = 1'-0"



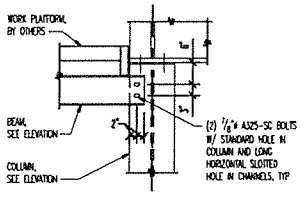
3 / S3.1 CLAMP DETAIL @ JACK
1 1/2" = 1'-0"



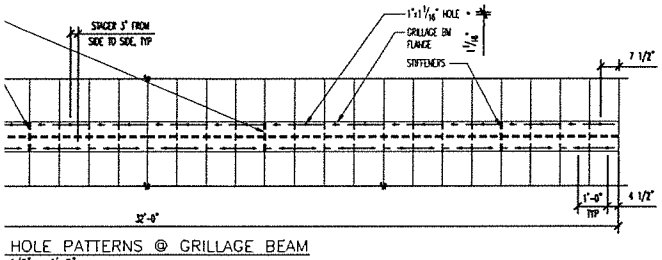
4 / S3.1 PLAN @ JACK SEAT
1 1/2" = 1'-0"



GE BEAM



6 / S3.1 SECTION
3/4" = 1'-0"



HOLE PATTERNS @ GRILLAGE BEAM
1/2" = 1'-0"

1" 2" 4" 8" 12"
1/4" = 1'-0"

0 1" 2" 4" 6" 9"
3/8" = 1'-0"

0 6" 1' 2" 4" 6'
1/2" = 1'-0"

0 4" 8" 16" 32" 4'
3/4" = 1'-0"

0 3" 6" 1' 2' 3'
1" = 1'-0"

0 2" 4" 8" 16" 2'
1 1/2" = 1'-0"

0 1" 2" 4" 8" 1'
3" = 1'-0"

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TEMPORARY SHORING FOR CTA GREENLINE STATION
LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

SEAL
ILLINOIS STRUCTURAL ENGINEER
ANDREW D. DELLANGELO
081-007282
STATE OF ILLINOIS
Date: 05/23/2018
IL Design Firm #: 184-001442
Expires: 11/30/2019

No.	Date	Description
	05/23/2018	ISSUED FOR CONSTRUCTION

Project #: 2118040.000
Drawn by: KRH
Checked by: RAF
Sheet Title:
DETAILS

S3.1
Structural Sheet: 7 of 7

02 DM

SUBMITTAL NO. 071-01-~~00~~

CITY OF CHICAGO
DEPARTMENT OF TRANSPORTATION
SUBMITTAL TRANSMITTAL

Project Name:	Lake Street Reconstruction Project: Damen to Ashland	Submitted By:	Capitol Cement Company, Inc.
Project No.:	B-4-118		6231 North Pulaski, Chicago, IL 60646
Contractor:	Capitol Cement Company, Inc.		☒ Gen ☐ Sub ☐ Supplier
Date:	~~May 4, 2018~~ July 10TH, 2018 DM	Contact Name:	Dan Melnyk
		Contact Phone:	773-478-2200

Pay Item Number	Submittal Number	Quantity	Description (Use Additional Sheets as Required)	Action
	071-01-~~00~~02		Shoring Tower Details and Structural Calculations for Supporting CTA Structure	
	DM		(Please also reference submittal 38-01-00 which provides details for the stiffeners)	

Action Key:

N/E: No Exceptions, submittal is approved. Proceed with fabrication/construction.

E/N: Exceptions Noted, submittal is approved as noted. Proceed with fabrication/construction. Please re-submit _ corrected copies.

R: Revise & Resubmit, submittal is rejected and returned for corrections as noted. Please review and resubmit.

N/A: No Action, submittal has not been reviewed.

Transmittal Dates:

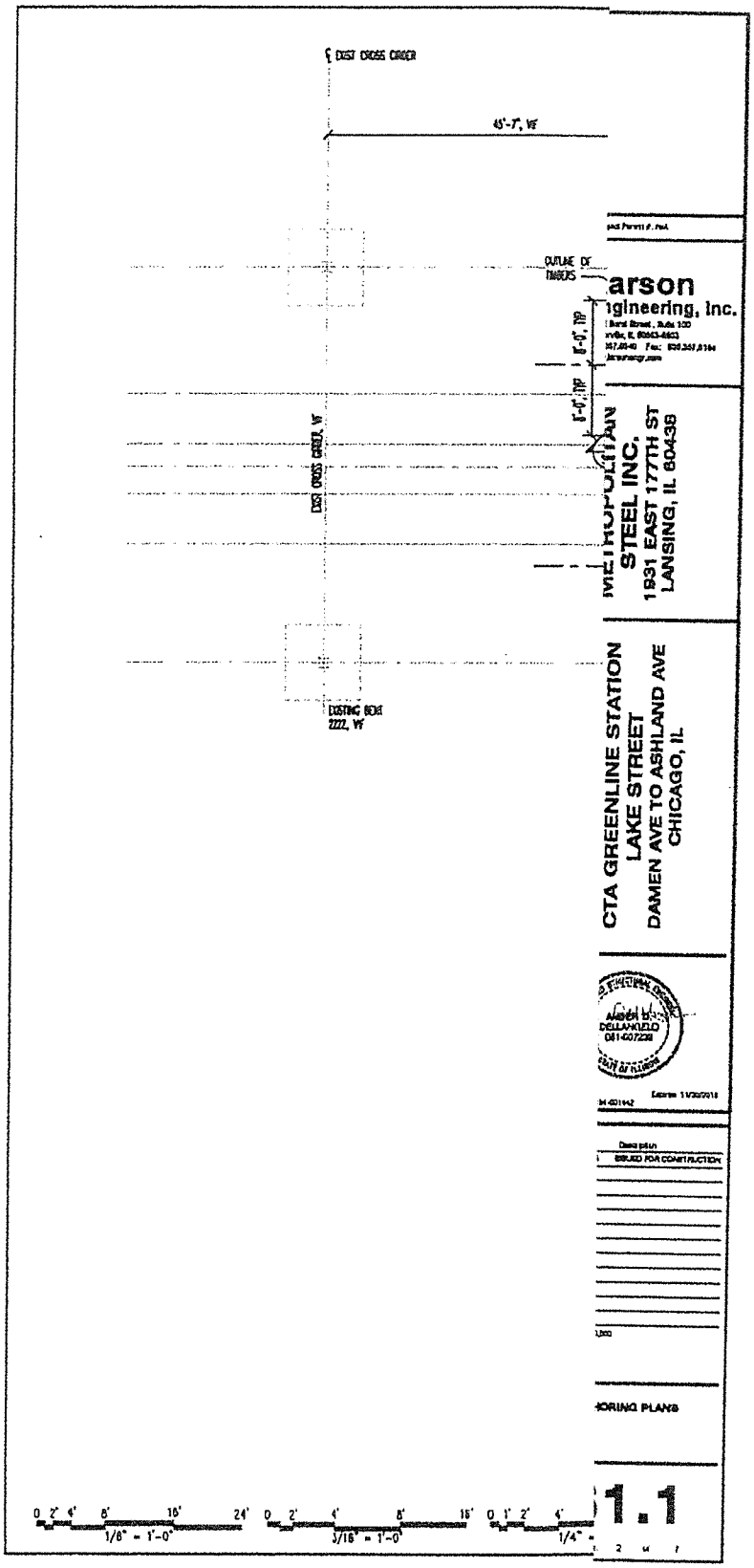
Date submitted by Contractor:	~~05/04/2018~~ 7/10/18 DM	Date transmitted to Contractor:	
Date transmitted to City Of Chicago		Date returned from :	
Date transmitted to :		Date returned from :	
Date transmitted to :		Date returned from :	

Distribution:

Transmittal Sheet:

Reviewed Submittal:

RE



arson
ngineering, Inc.

METROPOLITAN STEEL INC.
1831 EAST 177TH ST
LANSING, IL 60438

CTA GREENLINE STATION
LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

DELLAMORTE
061-007228

Expires 11/30/2018

Description
ISSUED FOR CONSTRUCTION

ORING PLANS

1.1

SIMPSON GUMPERTZ & HEGER
Engineering of Structures
and Building Enclosures

29 November 2018

Mr. Matthew Kuhl
Senior Project Manager, Associate Principal
Perkins+Will
410 North Michigan Avenue, Suite 1600
Chicago, IL 60611

Project 180427 – Structural Engineering Services for Damen Green Line Station, Chicago, IL

Re: Field Observation of Temporary Shoring Towers

Dear Mr. Kuhl:

At the request of the Chicago Department of Transportation (CDOT), we have reviewed the general condition of the existing temporary shoring towers proposed for re-use on the Damen Green Line Station Project. Recall that these towers were used by Metropolitan Steel this past summer to temporarily support Chicago Transit Authority (CTA) bent girders over Damen Avenue along the Green Line portion of the tracks.

BACKGROUND

Modifications were recently made to the existing track structure of the CTA Green Line at intersection of Damen Avenue and Lake Street, as part of the Lake Street Improvement project. The modifications included the installation of two new longitudinal girders over the Damen Avenue intersection and demolition of the existing columns supporting the two bent girders adjacent to the intersection. Four temporary shoring towers were used to support the existing bent girders during column demolition and remained in place until the bent girders were supported on the new longitudinal girders.

These shoring towers were purchased by CDOT for the current project. SGH was asked to review and document the present conditions of the shoring.

SGH reviewed drawings for the shoring towers titled “Temporary Shoring for CTA Green Line Station Lake Street,” as prepared Larson Engineering, Inc., and dated 5 May 2018, prior to reviewing the condition of the shoring towers in the field. The drawings are attached as Appendix A for reference.

An email from Dan Melnyk of Capitol Cement Co. dated 1 November 2018 noted that small pieces of the shoring tower assembly, including the angle braces, the shallow-depth top beams used for Bent 2219 work, the wood lag bolts used to attach the shoring towers to the timber cribbing, and other hardware, are being stored at Metropolitan Steel’s yard in Lansing, Illinois. The email can be found in Appendix B. We presume that all of these pieces will be returned to the site in time

for the start of the future Damen Green Line station project in good condition (meaning no repair or restoration to the components stored offsite will be required).

OBSERVATIONS

Neal Anderson and Corey Aumiller visited the storage site at Damen Avenue and Lake Street on 20 November 2018. The shoring towers are currently being stored in the vacant lot in the southwest corner of the intersection. General condition photographs of the shoring can be found in Appendix C. SGH observed the following:

- The steel framing of the shoring towers is in generally good condition and is consistent with the shoring tower drawings.
    - The steel framing of the shoring towers is partially assembled and supported directly on the ground (Photos 1 and 2).
    - The top W24s and the bottom W12s are unassembled from the steel tower frame and stored on wood dunnage (Photos 3 and 4).
    - Minor surface rust is present on the unpainted faying surfaces of the angle brace connections of the shoring tower (Photo 5).
- The timber cribbing of the shoring towers is in generally good condition and consistent with the shoring tower drawings.
    - The cribbing was assembled into panels of four 12x12 pieces of timber tied together with tie rods. The cribbing panels were supported on dunnage above the ground and on dunnage above the W12s (Photos 4 and 6)

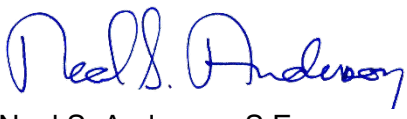
RECOMMENDATIONS

We recommend the following measures while the shoring is being stored until its later use. We presume these measures were previously agreed to by Metropolitan Steel.

- Provide a temporary fence around the partially assembled shoring towers and unattached materials. We presume this was agreed upon by Metropolitan Steel.
- Provide a tarpaulin over the partially assembled shoring towers and unattached materials to protect them from the weather.
- Redirect drainage water away from the partially assembled shoring towers. This will prevent excess runoff water from collecting at the tower bases and mitigate the muddy conditions surrounding the towers. This can be done by any number of measures, including, but not limited to, placing existing steel on cribbing, placing stone backfill to a higher elevation than the adjacent ground, and placing the material on a mud slab (lean concrete) that is at a higher elevation than the adjacent ground.
- High-strength A325 bolts loosened during disassembly of the shoring towers should be discarded. New A325 bolts should be used when reassembling the full towers.

Thank you for asking SGH to review the existing conditions of the shoring purchased for the new CTA station work. Please call if you have any questions or require any additional information regarding our review.

Sincerely yours,
SIMPSON GUMPERTZ & HEGER INC.
Illinois Professional Design Firm No. 184.003981



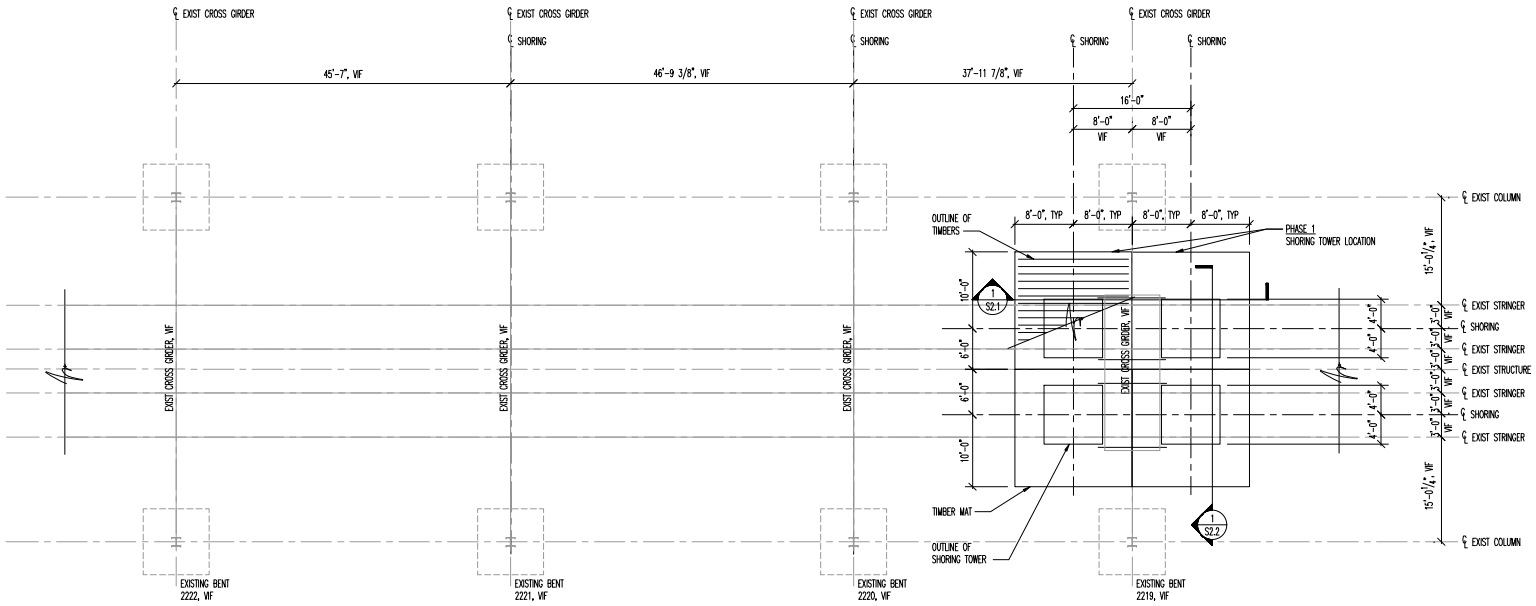
Neal S. Anderson, S.E.
Staff Consultant
IL License No. 081.004947

Corey J. Aumiller
Staff II - Structures

I:\CHI\projects\2018\180427.00-CDOT\WP\002NSAnderson-L-180427.00.ptl.docx

cc: Terry R. McDonnell S.E. – SGH
Doug Smith – P+W
Jennifer Heiney – P+W

Appendix A



1 S1.0 PHASE 1 SHORING LAYOUT PLAN
1/8" = 1'-0"

N

BUILDING CODES

1. CTA IDCM REV 6 AND AREMA-2018

DESIGN LOADS (PROVIDED BY EJM ENGINEERING)

1. PHASE 1 DL + LL + I = 90k PER STRINGER
2. PHASE 2 DL + LL + I = 233k

NOTE: SHORING TOWER HAS NOT BEEN DESIGNED FOR LATERAL LOADING PER AREMA-2018. PER DIRECTION FROM EOR, THE LATERAL LOAD IN THE STRUCTURE WILL BE SUPPORTED BY EXISTING STRUCTURE DURING THE TIME OF SHORING. DURING PHASE 2 COLUMNS AT BOTH BENT LINES WILL BE REMOVED. EOR TO VERIFY LATERAL STABILITY OF STRUCTURE DURING THIS TIME.

STRUCTURAL STEEL

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL MEMBERS SHALL BE IN ACCORDANCE WITH THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" AS INDICATED IN THE THIRTEENTH EDITION OF THE "MANUAL OF STEEL CONSTRUCTION" FOR ALLOWABLE STRESS DESIGN UNLESS NOTED OTHERWISE.
2. ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING STANDARDS UNO:
   - STEEL WIDE FLANGES — ASTM A992
   - STEEL ANGLES AND PLATES — ASTM A36
   - STEEL SHORING TOWER ANGLES AND PLATES — ASTM A572, GR. 50
3. ALL FILLER METAL USED IN WELDING SHALL BE 70 KSI YIELD, LOW-HYDROGEN.
4. ALL WELDING SHALL BE BY CERTIFIED WELDERS AND SHALL CONFORM TO THE "STRUCTURAL WELDING CODE", AWS D1.1 AND MEET AISC MINIMUM REQUIREMENTS FOR WELD SIZE.
5. FIELD CONNECTIONS ARE TO BE BOLTED AND INSTALLED IN ACCORDANCE WITH THE "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS." USE MIN $\frac{7}{8}$"ø SC A325 HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE. ANY HOLES DRILLED INTO EXISTING STRUCTURE OR WHERE RIVETS ARE REPLACED FOR PURPOSES OF TEMPORARY SHORING ARE TO BE FILLED W/ $\frac{7}{8}$"ø A325 GALVANIZED BOLTS AS A PERMANENT SOLUTION. BOLTS ARE TO BE FULLY TIGHTENED. SLIP CRITICAL BOLTS TO BE REPLACED AFTER BEING FULLY TENSIONED ONCE.

INSTALLATION INSTRUCTIONS:

1. PROVIDE CONCRETE JERSEY BARRIERS PROTECTION FOR ALL SHORING EXPOSED TO ALLEY OR STREET TRAFFIC. SIDEWALKS MAY NEED TO BE CLOSED AND BLOCKED OFF. JERSEY BARRIERS TO BE ANCHORED DOWN CONNECTION TO BE VERIFIED BY GENERAL CONCTRACTOR.
2. GENERAL CONTRACTOR TO PROVIDE SMOOTH AND LEVEL TEMPORARY CONCRETE PADS FOR PLACEMENT OF HARDWOOD MATS.
3. SHORING WILL BE ERECTED OVER CRANE MATS AS SHOWN ON THE PLANS AND OTHER MISC DETAIL CONNECTIONS.
4. JACKING TO TAKE PLACE DURING SHUTDOWN AND/OR BETWEEN TRAINS ONLY.
5. NO WELDING IS PERMITTED TO EXISTING STRUCTURE.
6. JACK CAPACITY TO BE 120 KIPS. JACKS TO BE CAPABLE OF MECHANICALLY LOCKING INTO PLACE SO THAT HYDRAULICS ARE NOT REQUIRED.

SHEET NOTES:

1. VERIFY DIMENSIONS AND ELEVATIONS WITH EXISTING CONDITIONS.
2. VERIFY DIMENSIONS WITH NEW WORK AT BENT LINES TO AVOID INTERFERENCES.

0 2' 4' 8' 16' 24' — 1/8" = 1'-0"
0 2' 4' 8' 16' — 3/16" = 1'-0"
0 1' 2' 4' 8' 12' — 1/4" = 1'-0"
0 1' 2' 4' 6' 9' — 3/8" = 1'-0"
0 6" 1' 2' 4' 6' — 1/2" = 1'-0"
0 4" 8" 16" 32" 4' — 3/4" = 1'-0"
0 3" 6" 1' 2' 3' — 1" = 1'-0"
0 2" 4" 8" 16" 2' — 1 1/2" = 1'-0"
0 1" 2" 4" 8" 1' — 3" = 1'-0"

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LANSING, IL 60438

TEMPORARY SHORING FOR CTA GREENLINE STATION
LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

SEAL
Digitally signed by Amber Dallangelo
DN: cn=AMBER DALLANGELO, c=US
Date: 2018.05.03 08:40:07 -05'00'
Date: 05/03/2018 Expires: 11/30/2018
IL Design Firm #: 184-001442

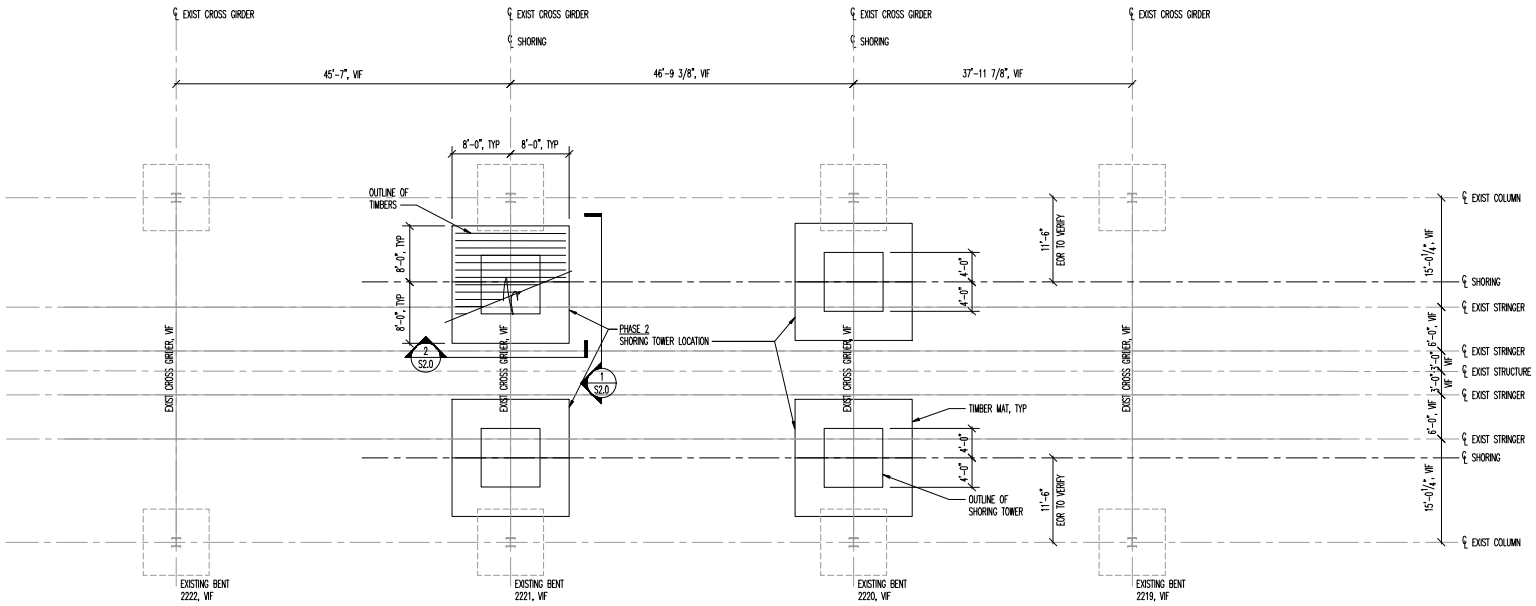
No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 2118D040.000
Drawn by: KRR
Checked by: RAF

Sheet Title:
PHASE 1 SHORING PLANS

S1.0

Structural Sheet: 1 of 7



1 S1.1 PHASE 2 SHORING LAYOUT PLAN
1/8" = 1'-0"

N

1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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LANSING, IL 60438

TEMPORARY SHORING FOR CTA GREENLINE STATION LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

SEAL
AMBER R. DELLANGELO
081-007056
STATE OF ILLINOIS

Date: 05/03/2018 Expires: 11/30/2018
IL Design Firm #: 184-001442

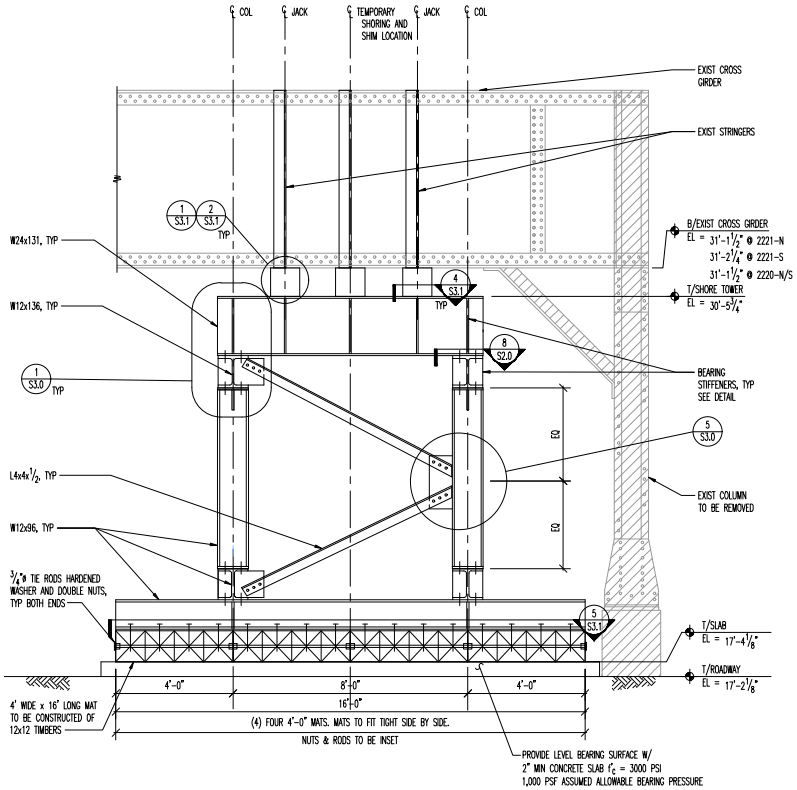
No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 2118D240.000
Drawn by: KRR
Checked by: RAF

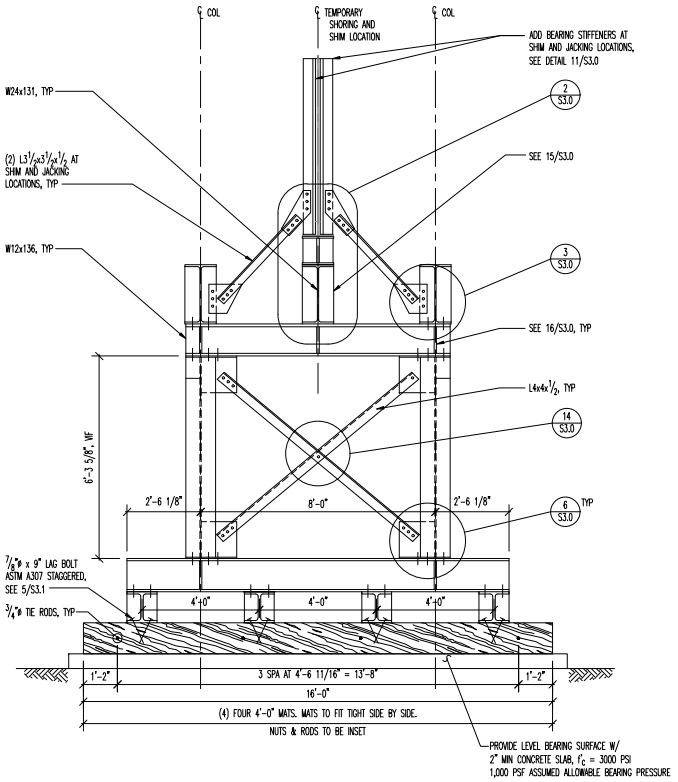
Sheet Title:
PHASE 2 SHORING PLANS

S1.1

Structural Sheet: 2 of 7



1 S2.0 TYPICAL SECTION SHOWING TEMPORARY SHORING
1/2" = 1'-0"



2 S2.0 TYPICAL SECTION SHOWING TEMPORARY SHORING
1/2" = 1'-0"

0 2' 4' 8' 16' 24'
1/8" = 1'-0"

0 2' 4' 8' 16'
3/16" = 1'-0"

0 1' 2' 4' 8' 12'
1/4" = 1'-0"

0 1' 2' 4' 6' 9'
3/8" = 1'-0"

0 6" 1' 2' 4' 6'
1/2" = 1'-0"

0 4" 8" 16" 32" 4'
3/4" = 1'-0"

0 3" 6" 1' 2' 3'
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STATE OF ILLINOIS
Date: 05/03/2018 Expires: 11/30/2018
IL Design Firm #: 184-001442

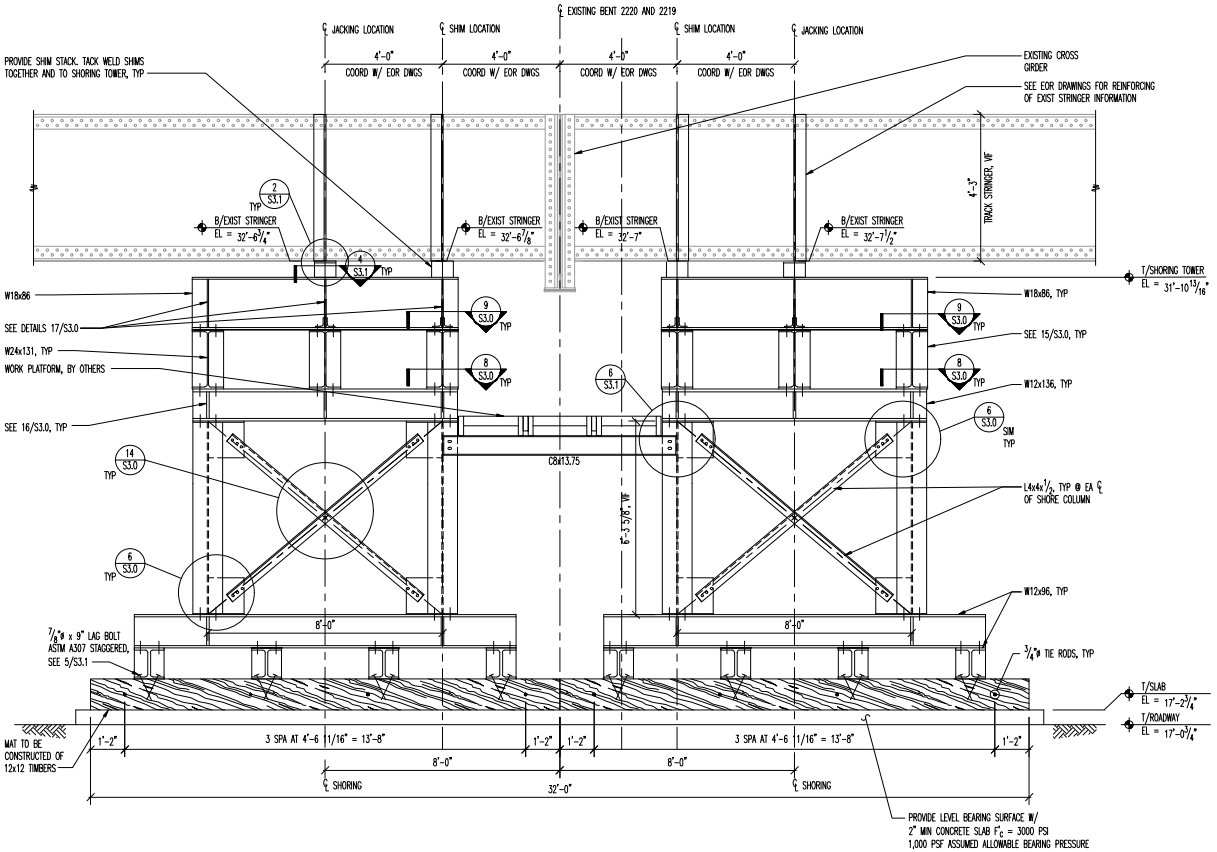
No.	Date	Description
	05/03/2018	ISSUED FOR CONSTRUCTION

Project#: 2118D240.000
Drawn by: KRR
Checked by: RAF

Sheet Title:
PHASE 2
SHORING TOWER SECTIONS

S2.0

Structural Sheet: 3 of 7



1 S2.1 TYPICAL SECTION SHOWING STRINGER TEMPORARY SHORING
1/2" = 1'-0"

1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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CLIENT
METROPOLITAN STEEL INC.
1931 EAST 177TH ST
LANSING, IL 60438

TEMPORARY SHORING FOR CTA GREENLINE STATION
LAKE STREET
DAMEN AVE TO ASHLAND AVE
CHICAGO, IL

SEAL
AMBER A. DELLANGELO 081-007256 STATE OF ILLINOIS
Date: 05/03/2018 Expires: 11/30/2018
IL Design Firm #: 184-001442

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Project#: 2118D040.000
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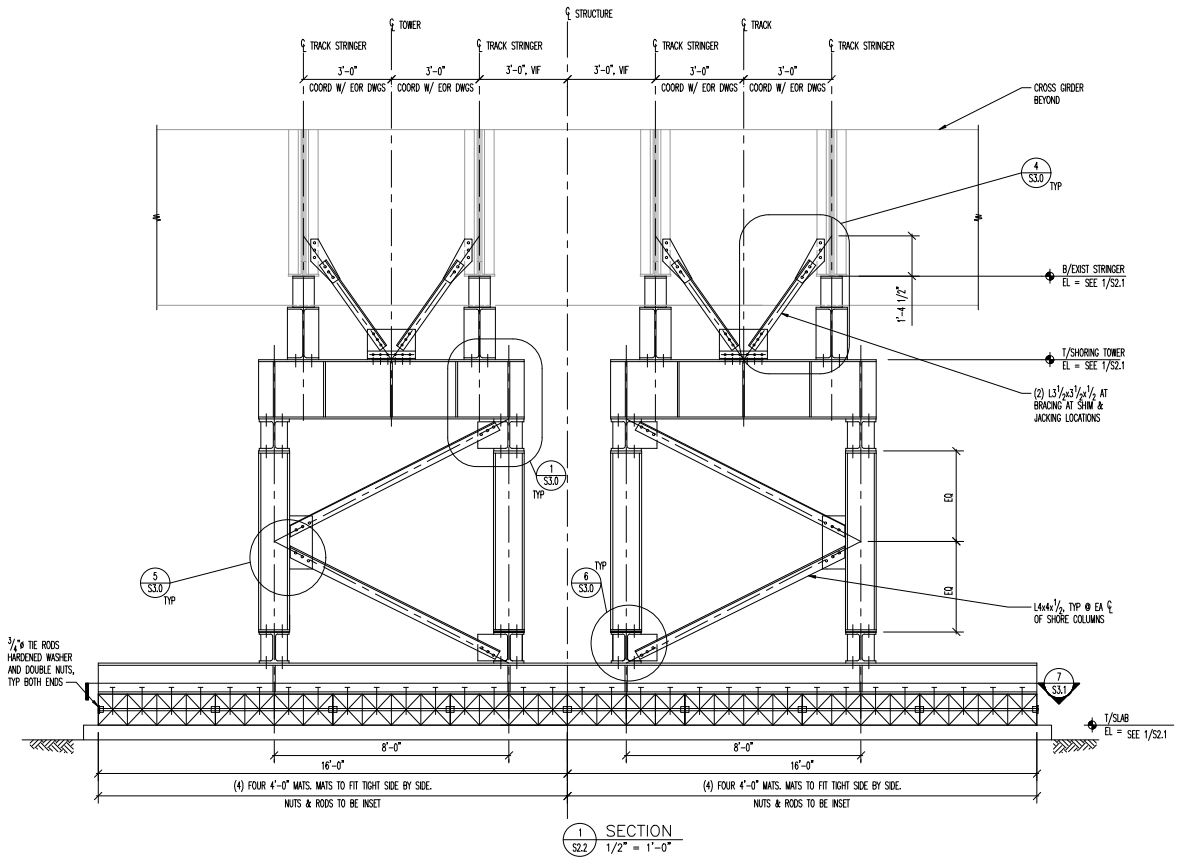
Sheet Title:
PHASE 1
SHORING TOWER SECTIONS

S2.1

Structural Sheet: 4 of 7



1 S2.2 SECTION
1/2" = 1'-0"

0 2' 4' 8' 16' 24'
1/8" = 1'-0"

0 2' 4' 8' 16'
3/16" = 1'-0"

0 1' 2' 4' 8' 12'
1/4" = 1'-0"

0 1' 2' 4' 6' 9'
3/8" = 1'-0"

0 6" 1' 2' 4' 6'
1/2" = 1'-0"

0 4" 8" 16" 32" 4'
3/4" = 1'-0"

0 3" 6" 1' 2' 3'
1" = 1'-0"

0 2" 4" 8" 16" 2'
1 1/2" = 1'-0"

0 1" 2" 4" 6" 1'
3" = 1'-0"

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TEMPORARY SHORING FOR CTA GREENLINE STATION
LAKE STREET
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CHICAGO, IL

SEAL
AMBER D. DELLANGELO 081-007056
Date: 05/03/2018 Expires: 11/30/2018
IL Design Firm #: 184-001442

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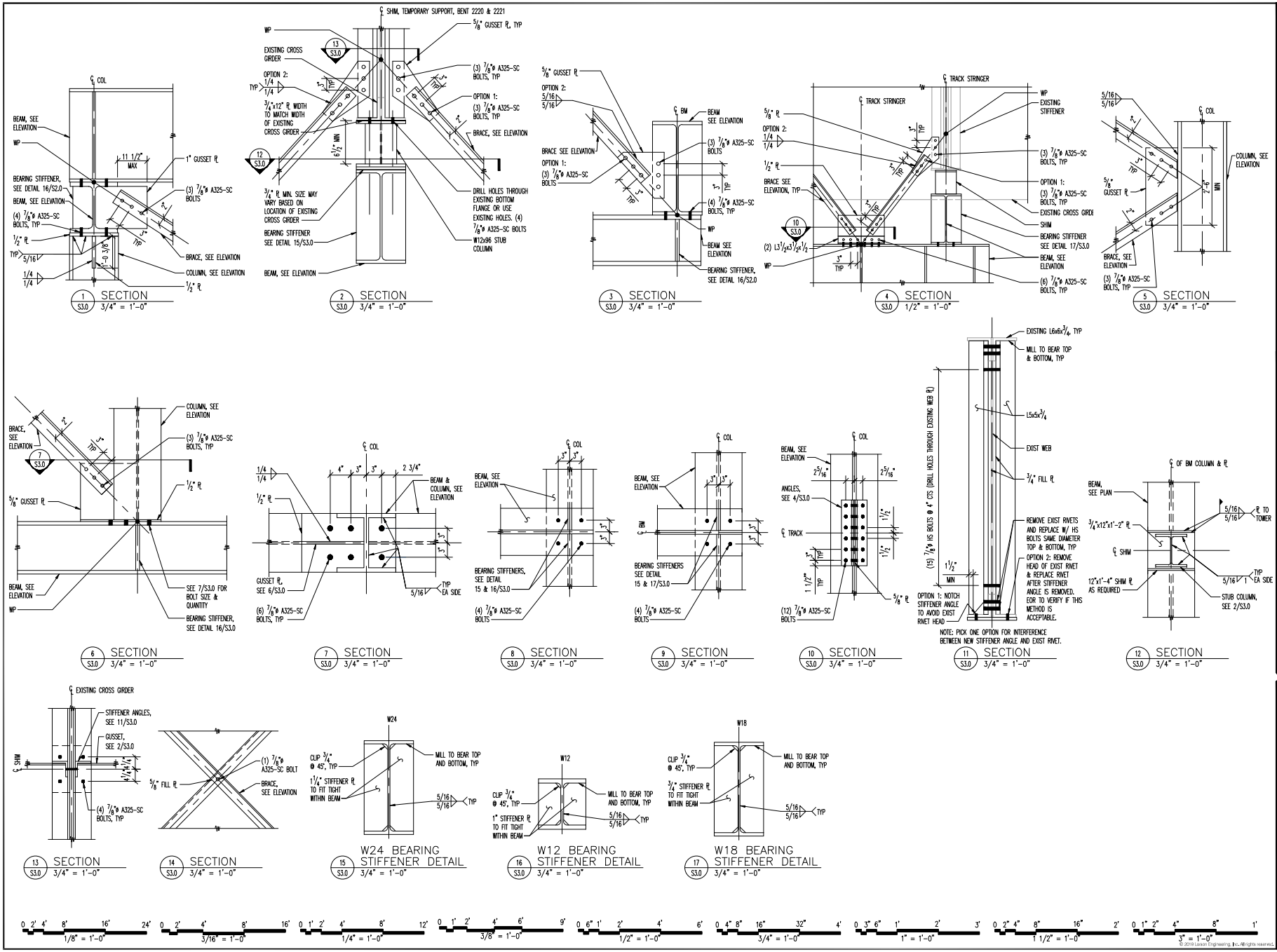
Project#: 2118D240.000
Drawn by: KRR
Checked by: RAF
Sheet Title:
PHASE 1
SHORING TOWER SECTIONS

S2.2

Structural Sheet: 5 of 7



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SEAL
ANDREW D. DELLANGELO
062-067256
STATE OF ILLINOIS

Date: 05/03/2018
IL Design Firm #: 184-001442
Expires: 11/30/2018

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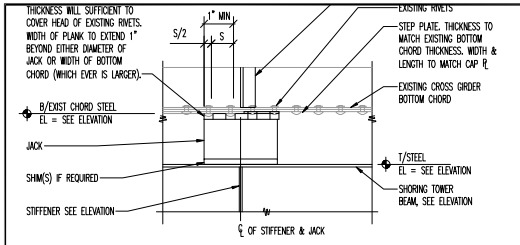
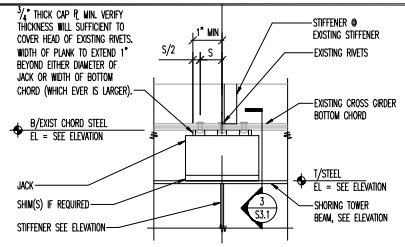
Project#: 2118D240.000
Drawn by: KRR
Checked by: RAF
Sheet Title:
DETAILS

S3.0

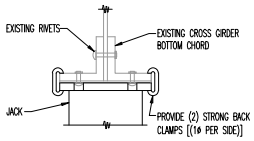
Structural Sheet: 6 of 7



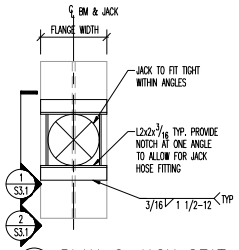
1 S3.1 TYP JACK DETAIL @ CROSS GIRDER STEP
1 1/2" = 1'-0"



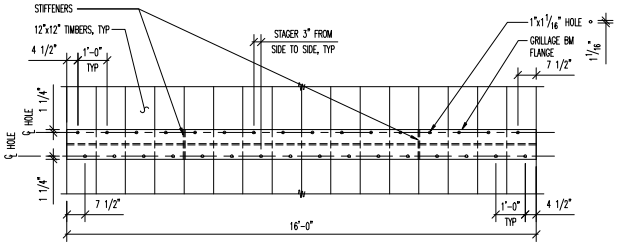
2 S3.1 TYP JACK DETAIL
1 1/2" = 1'-0"



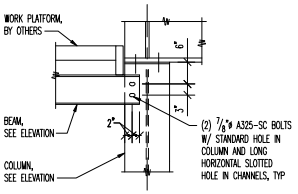
3 S3.1 CLAMP DETAIL @ JACK
1 1/2" = 1'-0"



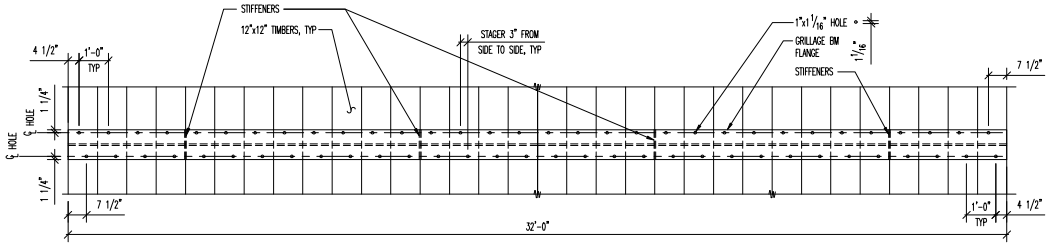
4 S3.1 PLAN @ JACK SEAT
1 1/2" = 1'-0"



5 S3.1 HOLE PATTERNS @ GRILLAGE BEAM
1/2" = 1'-0"



6 S3.1 SECTION
3/4" = 1'-0"



7 S3.1 HOLE PATTERNS @ GRILLAGE BEAM
1/2" = 1'-0"

1/8" = 1'-0" | 3/16" = 1'-0" | 1/4" = 1'-0" | 3/8" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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DETAILS

S3.1

Structural Sheet: 7 of 7

Appendix B

From: Dan Melnyk <melnyk@capitolcementco.com>
Sent: Thursday, November 1, 2018 10:44 AM
To: Conan Chan; Thomas, Kenneth
Cc: Bridget Stalla; Julian Silva; Anne Zhang; Tim Caballero; Dave Budzius; Rajiv Pinto; Eric Anderson
Subject: RE: Lake Street Project Letter #32

Conan,

We ended up using a stone base which is slightly higher than the existing ground elevation. This is clear in my proposal and this base was actually prepared before I received the field order asking for a price. We discussed the stone base and I was under the impression that this was acceptable.

If you would like for me to pour another pad in another portion of the lot, I will need to revise my proposal. I believe that the current location and the way it is stacked is sufficient, please review. If sufficient, I can place 8' fence and tarp around the towers and ownership can be transferred. If not sufficient, please let me know and I will revise the proposal to include a mud slab. What thickness mud slab will be required? What portion of the lot and to what elevation would you like this mud slab poured (Space needed is approximately 15'x60')? Also, I will need to add to the proposal the relocation of the towers from their current location to the mud slab. If the mud slab is requested under the current stored location of the towers, we would need to move the towers twice and this would need to be included in my revised proposal.

As a side note, there are small parts and pieces of the shoring tower assembly which are currently at Metropolitan's yard. This includes the angle braces, the small top beams used for bent 2219 work, lag bolts to attach the shoring towers to the timbers as well as hardware. While I can store them within the enclosed 8' fence area, I do not recommend it as these parts can walk away. What I recommend is that these small pieces be stored at a secure City facility. If you provide this location, I can have these items delivered to you.

Please advise on how to proceed. A photo taken on 9/24 is attached for reference.

Thank you,
Dan Melnyk
Capitol Cement Company, Inc.
6231 N. Pulaski Road
Chicago, IL 60646
773-478-2200 (O)
773-478-4646 (F)
773-617-7826 (C)
melnyk@capitolcementco.com

Appendix C

Photo 1

Partially assembled steel frames of shoring towers stored directly on the ground (looking southwest).

Photo 2

Partially assembled steel frames of shoring towers stored directly on the ground (looking north).

Photo 3

Disassembled W24s stored on wood dunnage.

Photo 4

Disassembled bottom W12s stored on wood dunnage. 12x12 heavy timber cribbing panels stacked on dunnage above the W12s.

Photo 5

Minor surface rust on unpainted surfaces of angle brace connection.

Photo 6

12x12 heavy timber cribbing panels supported on dunnage above the ground (looking west).